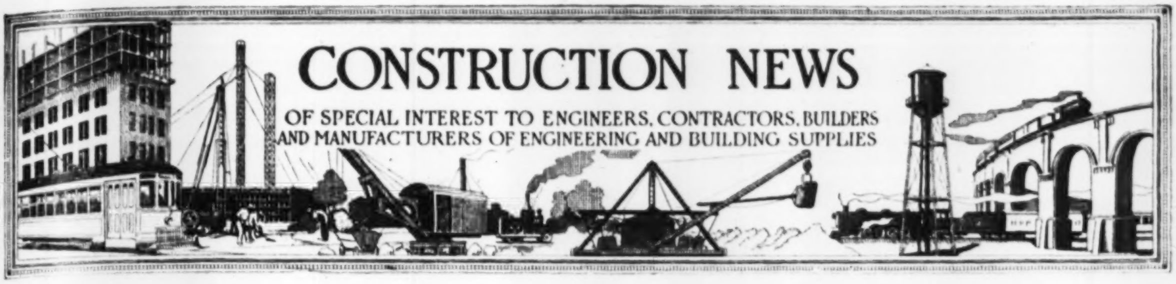

CONSTRUCTION NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATERWORKS

Bids Close		See Eng. News-Record
June 30	Salem, N. J.	June 19
	Adv. June 19.	
July 1	Salem, Ill.	June 19
	Adv. June 19.	
July 7	Brainerd, Minn.	June 26
July 15	Denton, Mont.	June 19
July 16	Milwaukee, Wis.	June 26
July 16	Decorah, Ia.	June 12
	Adv. June 12 and 19.	

SEWERS

Bids Close		See Eng. News-Record
June 28	West Montrose, Ont.	June 26
June 29	Kingston, Ont.	June 26
June 30	Sheboygan, Wis.	June 19
June 30	St. Catharines, Ont.	June 26
June 30	Muskegon, Mich.	June 26
	Adv. June 26.	
July 1	Wakefield, Neb.	June 12
July 1	Toledo, O.	June 26
July 2	Union Grove, Wis.	June 26
July 9	Dearborn, Mich.	June 26
	Adv. June 26.	
July 10	Milwaukee, Wis.	June 26
July 14	North Mankota, Minn.	June 19
	Adv. June 19.	
July 16	Milaca, Minn.	June 19

BRIDGES

Bids Close		See Eng. News-Record
June 30	Mora, Minn.	June 19
July 1	Lincoln, Neb.	June 26
July 2	Pocahontas, Ia.	June 19
	Adv. June 19.	
July 3	Mt. Clemens, Mich.	June 26
July 7	McAlester, Okla.	June 19
	Adv. June 12 and 19.	
July 7	Monroe, Ga.	June 19
July 7	Camden, N. J.	June 26
	Adv. June 26.	
July 7	Adna, Wash.	June 26
July 7	Walnut Cove, N. C.	June 26
July 7	Miles City, Mont.	June 26
July 7	Duluth, Minn.	June 26
July 8	Reading, Penn.	June 26
	Adv. June 26.	
July 10	Adrian, Mich.	June 26
	Adv. June 26.	
July 10	Riparius, N. Y.	June 19
	Adv. June 19.	
July 14	Princeton, Minn.	June 19
July 15	Brookston, Minn.	June 26
July 15	Cedar Rapids, Mich.	June 19
	Adv. June 19.	
July 17	Elmira, N. Y.	June 19
	Adv. June 19.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
June 28	Lincoln, Neb.	June 26
June 28	North East, Pa.	June 19
	Adv. June 19.	
June 28	Fairmont, W. Va.	June 19
June 28	Fairmont, W. Va.	June 12
June 29	Redwood Falls, Minn.	June 19
June 30	Creston, Ia.	June 19
June 30	Sheboygan, Wis.	June 26
June 30	Kearney, Neb.	June 12
June 30	Sidney, Ia.	June 19
June 30	Bismark, N. D.	June 19
June 30	Virginia	June 19
June 30	Mora, Minn.	June 19
June 30	Lawrence, Kan.	June 19
June 30	Indiana	June 19
June 30	Wheeling, W. Va.	June 26
June 30	Ft. Pierce, Fla.	June 26
	Adv. June 26.	
June 30	Indianapolis, Ind.	June 26
June 30	Yale, Okla.	June 26
June 30	Sandwich, Ont.	June 26
July 1	Hillsboro, Ore.	June 26
July 1	Clinton, N. C.	June 26
July 1	Massachusetts	June 26
July 1	Newark, N. J.	June 26
July 1	St. Tite, Que.	June 26
July 1	Ridgefield Park, N. J.	June 19
	Adv. June 19.	
July 1	Lewisburg, W. Va.	June 19
	Adv. June 12 and 19.	
July 1	Tabor, Ia.	June 19
July 1	Marshall, Ark.	May 22
July 1	Benkelman, Neb.	June 12
July 1	New York	June 12
	Adv. June 12.	
July 1	Douglas, Ga.	June 26
July 1	Macon, Ga.	June 26
July 2	Montreal, Que.	June 26
July 2	Ebensburg, Pa.	June 26
July 2	Grand Rapids, Minn.	June 12
July 2	Santa Ana, Cal.	June 19
July 2	New Jersey	June 19
July 2	Greensburg, Ga.	June 19
July 2	Bemidji, Minn.	June 19
July 2	Burlington, N. J.	June 12
	Adv. June 12.	
July 2	Hayes Center, Neb.	June 12
July 2	Albuquerque, N. M.	June 19
	Adv. June 19.	
July 2	Columbus, O.	June 26
July 2	Portland, Me.	June 26
July 3	Magnolia, Miss.	June 26
July 3	Pocatello, Idaho	June 26
July 3	Greenwood, S. C.	June 26
July 3	Beaver, Pa.	June 19
July 3	Pittsburgh, Pa.	June 19
July 3	Stockville, Neb.	June 12
July 5	Omaha, Neb.	June 12
July 5	Brunswick, Ga.	June 12
	Adv. June 5 and 12.	
July 5	Ford, Mich.	June 26
July 6	Montreal, Que.	June 26
July 7	Port Angeles, Wash.	June 26
July 7	Alexandria, Pa.	June 26
July 7	Indianapolis, Ind.	June 5
July 7	Leeburg, Fla.	June 19
July 7	Sanford, Fla.	June 19
July 7	Albert Lea, Minn.	June 19
July 7	Woodstown, N. J.	June 19
	Adv. June 19.	
July 7	Riverside, Cal.	June 19
July 7	Oakland, Cal.	June 26
July 7	Coffeeville, Miss.	June 26
July 7	Ortonville, Minn.	June 26
July 7	Poteau, Okla.	June 26
July 7	Ellsworth, Kan.	June 26
July 7	Washington	June 26
July 8	Bronson, Fla.	June 26
July 8	Nashville, N. C.	June 26
	Adv. June 26.	
July 8	Jersey City, N. J.	June 26
July 8	Fayetteville, Ark.	June 26
July 8	Omaha, Neb.	June 26
July 8	St. Louis, Mo.	June 26
July 8	Pipestone, Minn.	June 19
July 8	Harrisonville, W. Va.	June 19
July 8	Kingston, N. C.	June 19
July 8	Elkins, Va.	June 12
	Adv. June 12 and 19.	
July 9	Delaware	June 19
July 9	New Jersey	June 26
July 9	Springfield, Ill.	June 26
July 9	Palmerton, Pa.	June 26
	Adv. June 26.	
July 9	Illinois	June 26
July 10	Tennessee	June 26
	Adv. June 26.	
July 11	New Jersey	June 26
July 11	Appleton, Minn.	June 26
July 12	Racine, Wis.	June 26
July 14	Grand Rapids, Minn.	June 26
July 14	Fayetteville, W. Va.	June 26
July 14	Ivanhoe, Minn.	June 26
July 14	Cambridge, Minn.	June 26
July 14	Worthington, Minn.	June 26
July 15	St. Louis, Mo.	June 26
July 16	Springfield, O.	June 19
July 25	St. Louis, Mo.	June 26
July 30	California	June 19

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
July 1	Edwardsville, Ill.	May 15
July 15	Wapello, Ia.	June 26
	Adv. June 26.	
July 15	Marshalltown, Ia.	June 26
	Adv. June 26.	

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
June 30	Port Arthur, Ont.	June 12
June 30	Columbia, Ill.	June 26
June 30	New York, N. Y.	June 26
June 30	Philadelphia, Pa.	June 26
July 1	Shawenegan Falls, Que.	June 12
July 1	Matawan, N. J.	June 26
July 1	Hastings, Minn.	June 19
July 9	Los Angeles, Cal.	June 19
July 15	Flushing, N. Y.	June 19
Aug. 1	Duluth, Minn.	June 26
Aug. 1	Hastings, Minn.	May 15

BUILDINGS

Bids Close		See Eng. News-Record
June 29	Pittsburg, O.	June 19
June 30	Ecorse, Mich.	June 19
June 30	St. Hilarie, Minn.	June 19
June 30	Glassboro, N. J.	June 26
June 30	Philadelphia, Pa.	June 26
June 30	Coatesville, Pa.	June 26
July 1	Winona, Minn.	June 26
July 1	Austin, Minn.	May 22
July 1	Akron, O.	June 19
July 1	Wauwatosa, Wis.	June 19
July 1	Bimidji, Minn.	June 12
July 1	Middletown N. Y.	June 12
July 1	Youngstown, Alta.	June 12
July 1	Raymond, Alta.	June 12
July 1	Omaha, Neb.	June 19
July 1	Milledge, Ga.	June 19
July 1	Hartsville, S. C.	June 26
July 1	Lakewood, N. J.	June 26
July 1	Wilson, N. C.	June 26
July 2	Minneapolis, Minn.	June 26
July 2	George West, Tex.	June 26
July 2	Farrell, Pa.	June 26
July 2	Kingston, Ont.	June 26
July 2	Duluth, Minn.	June 19
July 2	Sterling, Wis.	June 19
	Adv. June 19.	
July 2	Huntington, W. Va.	May 29
	Adv. May 29, June 5 and 12.	
July 2	Fargo, N. D.	June 12
	Adv. June 5 and 12 .	
July 4	West Bethlehem, Pa.	June 12
July 5	Mountain Lake, Minn.	June 19
July 7	Brooklyn, N. Y.	June 26
July 7	Sanitorium, N. C.	June 26
July 8	Palatka, Fla.	June 26
July 8	Wellington, Kan.	June 26
July 9	Duluth, Minn.	June 26
July 9	Three Rivers, Que.	June 26
July 10	Port Jervis, N. Y.	June 26
July 10	Blooming Prairie, Minn.	June 19
July 11	Merced, Cal.	June 26
July 15	Fraserville, Que.	June 12
July 15	Greybull, Wyo.	June 26
July 15	Brainerd, Minn.	June 26
July 17	Malone, N. Y.	June 26
July 23	Lorain, O.	June 26
July 30	Austin, Minn.	June 26
Aug. 1	Gastonia, N. J.	June 26
Aug. 1	Kenosha, Wis.	May 15
Aug. 1	Virginia, Minn.	June 19

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
June 27	Post Office — Houghton, Mich.	May 29
June 27	Coal—New Orleans, La.	May 29
	Adv. May 29, June 5, 12 and 19.	
June 28	Buildings — Spec. 3952 — Yorktown, Va.	June 26
June 28	Quarters for Guards—Spec. 3977—Charleston, S. C.	June 26
June 28	Boat Shed and Dredging—Spec. 3974 — Hampton Roads, Va.	June 26
June 28	Machine Shop—Spec. 3978 —Yorktown, Va.	June 26
June 28	Crane and Fire Protection System—Spec. 3972—Bellevue, D. C.	June 26
June 28	Repairs to Flying Field, Road and Floor—Spec. 3980 —Quantico, Va.	June 26
June 28	Officers Quarters — Spec. 3904—Hingham, Mass.	June 26
June 28	Extension to Steam Heating System—Spec. 3976—Rockaway, N. Y.	June 26
June 28	Latrine and Washroom—Spec. 3975 — Rockaway, N. Y.	June 26

Bids Close		See Eng. News-Record
June 30	Building Wing — West Point, N. Y. Adv. June 5 to 19.	June 12
June 30	Revetment Repairs — Milwaukee, Wis.	June 12
July 1	Post Office—Towah, Wis.	June 5
July 1	Fuel Oil — Washington, D. C.	June 12
July 1	Warehouse—San Antonio, Tex.	June 26
July 2	Dredging—New York, N. Y. Adv. May 29, June 5, 12 and 19.	June 5
July 2	Grading, Excavating and Filling—Spec. 3256—Puget Sound, Wash.	June 19
July 2	Cranes—Spec. 3903—Mare Island, Cal.	June 26
July 2	Cranes—Spec. 3946—Boston, Mass.	June 26
July 2	Cranes—Spec. 3933—Brooklyn, N. Y.	June 26
July 7	Steel—Philadelphia, Pa. Adv. June 5, 12 and 19.	June 5
July 7	Paving Material—Galveston, Tex.	June 26
July 7	Locks and Dam—Pittsburgh, Pa. Adv. June 12 and 19.	June 12
July 7	Gas Mains — Stapleton, N. Y. Adv. June 19.	June 19
July 8	Gate—Operating Machinery —Cincinnati, O. Adv. June 12 and 19.	June 12
July 8	Post Office — Pittsburg, Tex.	June 12
July 9	Post Office — Montevideo, Minn. Adv. June 5, 12 and 19.	June 12
July 10	Post Office—Vinton, Ia.	June 19
July 15	Officers Quarters—Washington, D. C.	June 26
July 15	Officers Quarters—Wilmington, N. C.	June 26
July 16	School—Rapid City, S. D.	June 26
July 18	Silt Diversion Works—Los Angeles, Cal. Adv. June 19.	June 19
July 21	Dredging—New York, N. Y. Adv. June 26.	June 26
July 21	Dredging—Savannah, Ga. Adv. June 26.	June 26
July 21	Dredging—Baltimore, Md. Adv. June 26.	June 26
July 22	Dredging—Sault Ste Marie, Mich. Adv. June 26.	June 26
July 22	Post Office — Andalusia, Ala.	June 26
July 23	Cottage—Sorrento, Idaho.	June 26
July 23	Bridges—Leupp, Ariz.	June 26
July 23	Removing Wreck — New York, N. Y. Adv. June 26.	June 26
July 24	Jetty—Jacksonville, Fla. Adv. June 26.	June 26
July 24	Coal—Jacksonville, Fla. Adv. June 26.	June 26
July 25	Dredging — Philadelphia, Pa. Adv. June 26.	June 26
Aug. 26	Dredging—Honolulu, H. T. Adv. June 26.	June 26

MISCELLANEOUS

June 30	Levee, Bridge — Junction, Ark.	June 12
June 30	Flood Prevention Project —Lebanon, Pa. Adv. June 12.	June 12
July 1	Boilers, Piping, etc.—Central Islip, N. Y. Adv. June 19.	June 19
July 2	Water Tube Boilers and Stokers and Radial Brick Chimney—Lorain, O.	June 12
July 7	Lighthouse Tower—Ottawa, Ont.	June 26
July 7	Incinerator—Sedalia, Mo.	June 26
July 8	Cast Iron Pipe—Jersey City, N. J.	June 26
July 8	Masons Materials—Jersey City, N. J.	June 26
July 9	Wharf—Naramata, B. C.	June 26
July 11	Lift Gates—Los Angeles, Cal.	June 26
July 11	Wharf—Thessalon, Ont.	June 26
July 14	Road Gravel—Cambridge, Mass. Adv. June 12 and 19.	June 26
July 15	Freight and Trailers, etc.—New York, N. Y.	June 19
July 15	Wharf—Ottawa, Ont.	June 26
July 16	Milwaukee, Wis.	June 26
July 23	Wharf-Half Moon, B. C.	June 26

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Chicopee—City approriated $66,000 for stand pipe on Keating Hill, 130 ft. high, and 1,900,000 gal. capacity. D. P. Coakley, mayor.

N. J., Gloucester City—City receives bids in August rebuilding waterworks pumping station About $35,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

S. C., Williston—City plans to build waterworks system, including laying mains, erecting tower, tank and deep well pumping station. About $30,000. L. S. Mellichamp, clk. of comrs. of pub. wks. Engineer not selected.

O., St. Clairsville—City voted $65,000 bonds to build water works system.

Ind., Hammond—City having plans prepared building filtration plant in connection with waterworks system. About $400,000. P. J. Lyons, city engr.

Mich., Lansing—City election July 26 to vote on $300,000 bonds for extensions to waterworks.

Kan., Dodge City—City having plans prepared improving waterworks system, including standpipe and extension to present mains. About $35,000. C. H. Hathaway, clk. Black & Veatch, 507 Inter-State Bldg., Kansas City, Mo., engrs.

Kan., Lewis—City soon receives bids building waterworks system. Bonds for $40,000 voted for project. W. B. Rollins & Co., 209 Ry. Exch. Bldg., Kansas City, Mo., engrs.

Kan., Oxford—City soon receives bids building waterworks system. About $7000. W. B. Rollins & Co., 209 Ry. Exch. Bldg., Kansas City, Mo., engrs.

Kan., St. John—City having plans prepared building and extending waterworks and electric light plant. Bonds for $50,000 voted for project. Burns & McDonald, Interstate Bldg., Kansas City, Mo., engrs. Noted May 22.

Kan., Sharon Springs—City voted $50,000 bonds to improve distributing system involving 75,000 gal. tower and tank; also build power house, including one 100 and one 150 h.p. engines. Architect not selected.

S. D., Newell—City soon lets contract building 2,500,000 gal. storage reservoir, water softening plant, power plant, 50,000 gal. steel water storage tank on 100 ft. steel tower, water distributing system, etc. W. C. Buck, 1245 West Minnehaha Parkway, Minneapolis, consult. engr.

Mont., Scobey—City election June 30 to vote on $85,000 bonds to build complete waterworks system. W. B. Saunders, Helena, engr.

Mo., Caruthersville—City retained Black & Veatch, engrs., Interstate Bldg., Kansas City, to prepare plans for complete reconstruction and extension of water and electric light systems.

Ark., Conway—City plans to build reservoir and water mains. About $50,000.

Tex., El Paso—See "Streets and Roads."

Tex., Houston—City plans to improve waterworks. About $100,000 available.

Okla., Guthrie—City soon lets contract building complete waterworks system, involving 19,700 ft. c.i. pipe. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs. Noted Feb. 20.

Colo., Grover—Town voted $34,000 bonds to build waterworks system and electric light plant.

Cal., Avalon—See "Industrial Works."

Cal., Fullerton—City plans to improve water distributing system involving 10,000 ft. 2-4 in. metal pipe. About $45,000.

Cal., Los Angeles—Municipal Impvt. Dist. No. 10 (Westgate annexed section) election July 19, to vote on $90,000 bonds to build metal pipe lines to distribute water from Los Angeles aqueduct. W. Mulholland, 645 South Olive St., ch. engr.

Cal., Tracy—City election soon to vote on $15,000 bonds to extend waterworks and sewers.

Que., Montreal—City plans to build compensation well at pumping station to increase water supply to 25,000,000 gal. daily capacity. About $39,000. A. E. Doucet, engr.

Ont., Kincardie—Town Council approved $20,000 by-law to construct water mains. R. Ross, secy.

Ont., North Bay—Town Council passed by-law authorizing expenditure of $21,000 to extend water mains.

Ont., Scarborough—Town had preliminary estimates prepared by James, London & Hertzberg, engrs., Excelsior Life Bldg., Toronto, for 2000 ft. 18 in. steel intake, pumphouse, elevated steel tank and watermains. About $150,000.

BIDS DESIRED

Wis., Milwaukee—Until July 16, by Central Bd. Purchases, furnishing and building 20,000,000 gal. pumping engine for North Point Pumping Sta. on Lake Michigan shore, near North Ave., in 1st Ward; advertised in this issue.

Ia., Wapello—Until July 15, (change of date) by Muscatine-Louisa D. D. No. 13, at office of aud. Lewis Co., building steam driven pumping plant, containing one 36-in. and one 24-in. double suction centrifugal pumps. Bids will also be received for building to house this plant. Elliott & Harman Eng. Co., Peoria, Ill., engrs., advertised in this issue. Noted May 22.

Minn., Brainerd—Until July 7, by city for improvements to water system to include 14 mi. new mains, 6-8 tubular wells, 1 open well, pumping station with electrical pumping equipment and 300,000 gal rein.-con. water tank on 90 ft. tower. About $250,000. L. P. Wolff, 1001 Guardian Life Bldg., St. Paul, engr. Noted Apr. 24.

PRICES AND CONTRASTS AWARDED

(★Indicates award of contract)

★N. Y., Gilboa—Bd. Water Supply, Municipal Bldg., New York City, let contract building dam here, same being part of Schoharie watershed development for New York City water supply, to H. Nawn Constr. Co., 82 Savin St., Roxbury, Mass., $6,819,910. Noted June 5.

N. J., Bayonne—City received bids furnishing 2 high powered centrifugal pumps to increase water pressure throughout city from Buffalo Steam Pump Co., 39 Cortlandt St., New York City (no definite figure, but asked to submit estimate later); Dugan Forest Eng. Co., motor driven pump on concrete foundation provided by city, $9520; Worthington Pump Co., 115 Bway., New York City, $8700; J. R. Proctor, Inc., 721 Bway., Bayonne, 7 styles ranging in price from $7191 to $10,093.

★Pa., Tamaqua—Comrs. Water Wks let contract building reservoir on Owl Creek, Rahn Twp., Schuylkill Co., to Wertley & Houser, Pottsville. About $137,000. Noted April 24.

★Mich., Dearborn—Village let contract building watermains, to Monie-Dunbar Contg. Co., 901 Chemical Bldg., St. Louis, Mo., $76,265. Noted June 19.

★Okla., Garber—City let contract building water tank, 50,000 gal. capacity, and 100 ft. tower, to Chicago Bridge & Iron Co., 105th St. and Throop Ave., Chicago. About $7490. Noted June 19.

Cal., Santa Monica—City received bids furnishing (a) 7350 ft. 8-in. c.i. pipe, (b) 7350 ft. 8-in. standard w.i. screw pipe, (c) fittings and valves, from Pacific Pipe & Supply Co., 1002 Santa Fe Ave., Los Angeles, (a) $12,019, (b) $11,770, (c) $348; Water Works Supply Co., 215 West 7th St., Los Angeles, (a) $12,019, (c) $468; Amer. Cast Iron Pipe Co., Citizens Natl. Bank Bldg., Los Angeles, (a) $12,185, (c) $491; Crane Co., 321 East 3rd St., Los Angeles, (b) $11,381, (c) $469; N. Nelson Co., 439 East 3rd St., Los Angeles, (b) $11,076.

Sewers

PROPOSED WORK

N. Y., Syracuse—City plans to build sewers in Crosset St. from Robinson Rd. to South Geddes St., Euclid Ave. from Fellows to Westmoreland Aves., Fellows Ave. from Clark St. to Euclid Ave., Westmoreland Ave. from Euclid Ave. to point 750 ft. north, Kensington Rd. from Lancaster Ave. to point 140 ft. west. About $36,000. H. C. Allen, city engr.

N. J., Palmyra—City receives bids in August or September, building sanitary sewerage system involving 12 mi. 8-15 in. T. C. pipe, combined sewage pumping station and disposal works to treat sewage of Palmyra and Riverton municipalities. About $125,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

Sewers (Continued)

N. J., Westmont—City soon receives bids building sanitary sewerage system involving 10 mi. 8-12 in. T. C. pipe, sewage, ejector station and sewage treatment works. About $110,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

Pa., Mt. Union—Boro. soon lets contract furnishing labor for laying 1700 ft. storm sewers in South Division, East Market and East Water Sts. About $11,000. Boro. will furnish vitr. pipe, brick, castings and material. D. W. Dillman, 81 Altoona Trust Bldg., Altoona, engr.

Pa., Pittsburgh—City passed ordinance to lay sewers in Dido Way, Flowers Ave., Prescott and Kilbourne Sts. About $10,000. T. Reed, City County Bldg., engr.

Md., Baltimore—G. F. Weighardt, city highway engr., submitted report to Municipal Bd. Estimates stating that it will cost about $15,000,000 to build sewers in new annex and complete sanitary sewerage system in old city; also outlined plan for building sewers in Herring Run Dist. of new annex, estimated cost, $1,000,000.

S. C., Ft. Mill—City plans election to vote on $25,000 bonds to build sewers in various streets.

Fla., Century—A. Sullivan Lumber Co. soon receives bids installing sewerage system in principal streets. About $12,000. State Bd. Health, Tallahassee, making plans and surveys.

Fla., Kissimmee—City Comn. soon receives bids building sewerage system in south and east sections of city. About $15,000.

O., Cincinnati—See "Streets and Roads."

O., Piqua—See "Streets and Roads."

O., Springfield—City soon lets contract trenching and laying 16,000 ft. 6-24 in. vitr. pipe sewers in North Limestone St. from North to Columbia Sts., Clay St. from Catherine to Rose Sts., Warder Park Addition, involving 3000 cu.yd. earth and rock trenching. About $30,000. O. E. Carr, city mgr. Noted May 1.

Ind., Indianapolis—Bd. Pub. Wks. soon lets contract excavating, placing and backfilling 555 ft. sewer in 1st alley north of Elmira St. 12 in. vitr. pipe, cost. $1800; 226 ft. sewer from main sewer in Blackford St. to point 226 ft. west, 15 in. pipe, $1600; 1970 ft. sewer in 1st alley east of School St., involving 190 ft. 2 ft. 6 in. brick sewer, 390 ft. 18 in. and 1390 ft. 12 in. vitr. sewer, $7800. F. C. Lingenfelter, 3025 Park Ave., engr.

Mich., Birmingham—City soon lets contract furnishing labor and materials for building and completing sewers in Brown St., involving 600 ft. 8-in. and 236 ft. 6-in. vitr. pipe, etc.; Southfield Ave., 1985 ft. 8-in. and 982 ft. 6-in. vitr. pipe, etc.; Prine St., 1470 ft. 8-in. and 644 ft. 6-in. vitr. pipe, etc.; Purdy St., 800 ft. 8-in. and 360 ft. 6-in. vitr. pipe, etc.; Maple Ave., 2130 ft. 8-in. and 406 ft. 6-in. vitr. pipe and 40 ft. 8-in. c.i. pipe, etc. Coleman & Harding, 702 Kresge Bldg., Detroit, engrs.

Mich., Detroit—Dept. Pub. Wks. soon lets contract furnishing all labor and material (except iron manhole rings and covers), building and finishing complete, together with backfilling. 1280 ft. sewer in Charlevoix Ave. from Connors Ave. to Connors Creek. Alternate bids will be received on brick, vitr. segment block, rein.-con. pipe, plain concrete and concrete segment block, 30, 36 and 42 in. cylinder. C. W. Hubbell, city engr.

Wis., Sheboygan—City plans to excavate and lay 1.7 mi. sewer in Michigan Ave. to North 10th St., involving 5000 ft. 10-in. vitr. pipe. About $20,000. C. U. Boley, city engr.

Kan., Cedar Vale—City having survey made building complete sanitary sewerage system. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs.

Kan., Smith Centre—City retained Black & Veatch, engrs., Interstate Bldg., Kansas City, Mo., to prepare plans for complete sanitary sewerage system.

Wyo., Cheyenne—City election July 29 to vote on $300,000 bonds to build sanitary and storm sewers. E. W. Glafke, city engr.

Mo., Holden—City retained Archer & Stevens, engrs., New England Bldg., Kansas City, Mo., to prepare plans for sanitary and storm sewers. About $54,000.

Tex., El Paso—See "Streets and Roads."

Tex., Houston—City voted $50,000 bonds to build sewers in various streets.

Colo., Ft. Collins—City had plans prepared for sewerage system. About $143,000. W. B. Check, city engr.

Cal., Tracy—See "Waterworks."

BIDS DESIRED

O., Toledo—Until July 1, by Dir. Pub. Serv., building local sanitary sewer No. 1358 in Main Sewer Dist. No. 37, involving 10,790 ft. 8 and 10-in. vitr. sewer pipe, 43 manholes, etc. About $25,900. H. C. McClure, city engr.

Ind., Indianapolis—Until July 11, by Bd. Sanitary Comrs., City Hall Bldg., constructing Div. No. 1, of sewage disposal plant for Sanitary Dist., work involves 960 lin.ft. 84-in. rein.-con. intercepting connecting conduit, 300 ft. 75-in. rein.-con. sewer extension; rein.-con. grit chambers and overflow, 1 small pump house, superstructure of brick, one 4-in. electric driven drain pump, piping and valves, 7 sluice gates, roughing and guard racks with complete equipment; 1000 lin.ft. 60-in. Class "A" c.i. inverted siphon under the river and 7600 lin.ft. 78-in. rein.-con. sanitary conduit; advertised in this issue.

Mich., Dearborn—Until July 9, by F. C. Reamer, village clk., furnishing materials and labor building sewers involving 29,078 ft. 12-36 in. sewer pipe and 85 manholes; advertised in this issue.

Mich., Muskegon—Until June 30, by B. H. Tellman, city recdr., furnishing material and labor for building main and lateral sewers in Dist. No. 28, to be laid in sandy oil, ground water encountered at depth 10-14 ft.; work involves 5461 lin.ft. 24-in. D.S. sewer tile, maximum cut 16 ft., average cut 10-14 ft., 2242 lin.ft. 20-in., average cut 12 ft., 1106 ft. 18-in., average cut 12 ft., 38,513 ft. 8-15 in., 13 "Y" branches on 24-in. pipe, etc.; advertised in this issue. Noted June 19.

Wis., Milwaukee—Until July 10, by Sewerage Comn., building extensions to intercepting sewer system, involving 6200 lin. ft. 72 in. concrete in tunnel, 430 vertical ft. of standard manholes, 60 vertical ft. of drop manholes and 8 manhole frames and covers, etc.; advertised in this issue.

Wis., Union Grove—Until July 2, by M. J. Tappins, secy. bd. control, for main drain at Southern Wisconsin Home for Feeble Minded. Work involves 2550 ft. 18 in. and 5825 ft. 20 in. vitr. pipe, 24 2 x 6 in. and 9 6 x 18 in. tees, 21 manholes, 1 bulkhead and 1 12-in. flap valve.

S. D., Aberdeen—Until July 28, by F. B. Raymond, city aud., building 8 mi. vitr., segmental block or concrete storm sewer, 10-96 in. diameter, 100 manholes, 212 catch basins; advertised in this issue.

N. M., Albuquerque—Until July 2, by A. R. Hebenstreit, city mgr., building storm sewers and paving various streets. Noted May 29.

N. M., Raton—Until June 30, by P. Turner, city clk., building storm sewer in Sewer Dist. No. 3. Work involves 1062 ft. 10-in. vitr. sewer pipe, 9505 ft. 12-48 in. concrete conduit, 10 catch basins and 25 manholes; advertised in this issue.

Ont., Kingstow— Until June 29, by Dept. Pub. Wks., Ottawa, installing sewerage system and disposal plant at Sydenham Hospital, here. About $100,000.

Ont., St. Catharines—Until June 30, by Chn. Bd. Wks., City Hall, building sewerage system in Facer St. Dist., involving 14,207 lin.ft. 8-15 in. tile; in Western Dist., involving 7210 lin.ft. 10-42 in. tile; in Eastern Dist., involving 2070 lin.ft. 10-15 in. tile. W. P. Near, city engr.

Ont., West Montrose—Until June 28, by C. D. Bowman, engr., West Montrose, building drainage system, involving 14,500 cu. yd. excav., for P. A. Snyder R. R. No. 1, Breslau. About $20,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., Hartford—City received bids rebuilding 500 ft. 48 in. concrete or block sewers in Nook Farm, from N. C. Cassiano & Co., West Hartford, $11,624; F. A. Barone & Co., Hartford, $13,882; O'Neil Bros., Hartford, $14,979.

N. J., Bellville—City received bids building 23,415 ft. sewer in Mill, Quarry, Terrace, Schuyler, Cleveland, Van Rensselaer, Dow, Factory and Clark Sts. and Howard Pl., from Amer. Utility & Constr. Co., Belleville; Jersey Bldg. & Constr. Co., Plum Point Lane, Newark; Jammouneau Co., 17 Academy St., Newark.

★N. J., Camden—Dept. Highways let contract laying 5300 ft. concrete sewers in Mechanic and Cooper Sts., to W. P. Corson, 1141 Sycamore St., $91,372. Noted June 19.

***W. Va., Weston**—State let contract building sewage disposal plant, at State Hospital here, to C. E. Collins, Drexel Bldg., Phila. About $45,000.

★N. C., Durham—City let contract laying 1 mi. 8-in. terra cotta sewer pipe in Shepherd, Vickers, Yancey and Parkers Sts., to J. J. Quinn Co., 61 Reily Ave., Miami, Fla. About $20,000.

★O., Cleveland—City let contract laying 815 ft. Nos. 2 and 3 C brick sewers in St. Clair Ave. from Woodworth Ave. to East 138th St., involving 865 ft. 12-24 in. vitr. pipe, to River Constr. Co., 12,109 Mayfield Rd., $18,658.

Mich., Detroit—Dept. Pub. Wks. received bids building lateral sewers Nos. (a) 3134, (b) 3152, (c) 3154, (d) 3155, (e) 3157, from Western Constr. Co., 1208 Ford Bldg., (a) $4178, (b) $7789, (c) $8991, (d) $7116, (e) $7539; Walker & Teetaert Co., 442 St. Clair Ave., (a) $5705; Detroit Contg. Co., Penobscot Bldg., (b) $8230, (c) $9000, (d) $7702, (e) $7799; R. D. Baker, 1415 Penobscot Bldg., (b) $9785, (c) $10,935, (d) $9590, (e) $10,265. Noted June 12.

★Wis., Milwaukee—Bd. Pub. Wks. let contract furnishing materials and laying 5134 lin.ft. sewers in Montana St., Quincy, Taylor and Teutonia Aves., to M. Synovitz, 944 2nd Ave. and H. Hohensee, Wauwatosa. About $17,500. Work involves 1622 ft. 8-in., 2957 ft. 12-in., 555 ft. 15-in. and 405 ft. 18-in. concrete pipe.

★Kan., Wichita—City will build 7 mi. 8-in. lateral sewers. About $42,000. Work will be done by day labor.

★Ark., Paragould—City let contract building sewers in Dist. No. 6, to P. F. Connelly, 814 Rector Ave., Little Rock. About $17,000.

★Tex., Dallas—City let contract laying 13,457 ft. concrete and tile storm sewers in Wall St. Dist., to Standard Eng. & Constr. Co., Interurban Bldg., $75,292.

★Ore., North Bend—City Council let contract building sewer in Porter Hill, to Moon & Co., Marshfield. About $23,188.

Cal., Oakland—See "Streets and Roads."

Bridges

PROPOSED WORK

Mass., Amherst—Hampshire Co. plans to build cement bridge over Mill River. About $18,000. Address E. E. Hodgkins, Northampton, and N. Seelye Hitchcock, Easthampton, co. comrs.

N. J., Elizabeth—Bd. Freeholders Union Co. soon lets contract building concrete and steel bridge over Rahway River on Monroe St., 60 ft. wide with 3 spans, 31.4 ft. each. J. L. Bauer, 120 Broad St., engr. Noted April 3.

Pa., Phila.—Dept. Pub. Wks. rejected bids repairing and repainting bridge over Cobbs Creek on Baltimore Ave. Noted June 12.

Fla., Jacksonville—City soon receives bids building rein.-con. viaduct from Lee to Park St., Riverside-Brooklyn-Lackawanna Sect. of city. About $1,000,000, cost to be borne equally by city, Jacksonville Traction Co. and Jacksonville Terminal Co. F. M. Edwards, Jacksonville, engr. Address J. T. Alsop, Bisbee Bldg.

Mont., Hamilton—Ravilli Co. plans to build 280 ft. bridge over Bitterroot River, 16 ft. wide, two 140 ft. spans. About $20,000. Federal aid asked. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mo., Jefferson City—Cole Co. soon receives bids building rein.-con. and steel bridge over Osage River, south of Hubers Ferry, for Cole and Osage Counties. About $100,000. Waddell & Son, Inc., 800 Graphic Arts Bldg., Kansas City, Mo., engrs.

Cal., Dismores—Comrs. Humboldt Co. (Eureka) having plans prepared by H. J. Brunnier, engr., Sharon Bldg., San Francisco, for concrete arch bridge over Little Van Dusen Creek, here. About $25,000. A. J. Logan, Eureka, co. surveyor.

Cal., Red Bluff—Tehama Co. election July 1 to vote on $521,000 bonds to build bridges.

Ont., Arkona—Town Council plans to build concrete and steel bridge. About $25,000. R. Crawford, clk.

Ont., Mono Centre—Town Council plans to build steel and concrete bridge. About $12,000. W. A. Henry, clk.

Bridges (continued)

BIDS DESIRED

N. J., Camden—Until July 7, by Comrs. Camden Co. building rein.-con. arch bridge over Newton Creek, on Nicholson Rd. involving 1400 cu.yd. concrete, 292 piles, 12 x 25 ft., 6000 cu.yd. earth fill and 712 sq. yd. amiesite road with concrete base. F. W. Gercks, chn. bridge com.; advertised in this issue.

Pa., Reading—Until July 8, by C. P. Rhode, controller, Berks Co., building rein.-con. girder bridge over West Branch Creek in Washington Twp., about 2 mi. from Barto Sta.; advertised in this issue.

N. C., Walnut Cove—Until July 7, by Comrs. Stokes Co. (Danbury) building 600 ft. steel bridge and trestles, 20 ft. wide, here. About $20,000. R. R. King Danbury, engr.

Mich., Adrian—Until July 10 (change of date), by city, building rein.-con. bridge ovér Raisin River, on West Maumee St. N. B. Washburn, comr. G. P. Love, city clk.; advertised in this issue. Noted May 1.

Mich., Mt. Clemens—Until July 3, by F. F. Rogers, state highway comr., Lansing, building 230 ft. rein.-con. bridge over Clinton River on Gratiot Ave., consisting of two 79 ft. and one 75 ft. span, to be known as Bridge No. 256. Work involves 3660 cu.yd. rein.-con. Cost will be borne by State, Macomb Co. Rd. Comn. and Detroit United Ry: Noted May 29.

Minn., Brookston—Until July 15, by R. W. Aeton, engr., St. Louis Co., building 300 ft. steel bridge, 24 ft. wide, cement foundation and piers, over St. Louis River. About $15,000.

Minn., Duluth—Until July 7, by Comrs. St. Louis Co., building 12-ft. concrete span bridge over Winchell Creek on Wakely Rd., 120-ft. concrete span bridge over Brown's Creek on Brown Rd. and 30-ft. concrete span bridge over Clint Creek on State Highway No. 1. About $10,000.

Minn., Ortonville—See "Streets & Roads."

Neb., Lincoln—Until July 1, by W. L. Minor, clk. Lancaster Co., building 100 ft. rein.-con. bridge over Oak Creek, on 14th St., involving 455 cu.yd. rein.-con., 15.5 tons steel, 1300 lin.ft. wooden piling and 500 cu.yd. earth approach and fill. About $16,000; city to bear part of cost. A. H. Edgren, co. engr.

Mont., Miles City—Until July 7, by Comrs. Custer Co., building concrete and steel bridge across Cottonwood Creek, ½ mi. south of Northern Pacific R.R. tracks. Cost to be borne by county and Northern Pacific R.R. H. E. Fearnald, co. engr.

Wash., Adna—Until July 7, by State Highway Comn., Olympia, building 220 ft. steel span bridge and approaches over Chehalis River on Ocean Beach Highway, Lewis Co.

Cal., Oakland—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Providence—Bd. Contr. & Supply let contract widening Hawkins St. bridge to W. V. Polloys & Co., 1405 Turks Head Bldg. About $15,000.

★Pa., Phila.—Dept. Pub. Wks. let contract to M. and J. McHugh, 892 Market St., building bridge over Schuylkill River, cost $41,569 and on Erie Ave. over Pennsylvania and Reading R. R., $5410; to W. A. Mundy, 228-30 Arch St., bridge on Penrose Ferry Rd., over Eagle Creek, $3465; to G. B. Clopp, 3717 Filbert St., for repairs to railing at Broad and Callowhill Sts., $3000; to Belmont Iron Wks., 22nd and Washington Ave. for repairs to railing at Broad and Noble Sts., $815. Noted June 12.

★Va., South Hill—W. Hunter, secy., South Hill-Henderson Bridge Corp., let contract building 720 ft., steel and cement bridge, here, to Roanoke Iron & Bridge Co., Roanoke. About $47,000. Noted June 19.

★W. Va., Pineville—Wyoming Co. let contract building 2 rein.-con. bridges over Barkers Creek, to Corns-Thomas Co., Charleston, $9,184. Noted June 5.

★N. C., Dunn—Comrs. Harnett Co. Lillington, let contract building 2 steel bridges, here, to J. W. Turnage, Lillington. About $17,500.

★Ala., Montgomery—Bd. Revenue Montgomery Co. let contract building rein.-con. bridge over Catoma Creek, on Norman Bridge Rd., 5 mi. south of here, to J. R. Peterson, West Point, Ind. About $75,968. Noted May 9.

★O., Akron—Comrs. Summit Co. let contract building 48 ft. rein.-con., slab and girder bridge over old Ohio Canal on Ash St., 42 ft. wide, to Hovey & Humphrey, c/o E. C. Hovey, 143 Merriman Rd. About $13,700. Noted May 29.

★Wis., Alma—Buffalo Co. let contract building Beef River Bridge to La Crosse Bridge Co., La Crosse, $12,187.

★Mo., Millersburg—Comrs. Millersburg Special Rd. Dist., Callaway Co., let contract building 83 ft. rein.-con. bridge over Cedar Creek, involving 320 cu.yd. rein.-con. and 50 cu.yd. concrete, to Kansas City Bridge Co., 1012 Baltimore Ave., Kansas City, $10,846. Noted May 29 under "Streets and Roads."

★Mo., St. Louis—City let contract building rein.-con. bridge over Missouri Pacific Ry. tracks at Southwest Ave., to Woermann Constr. Co., Century Bldg., $28,984. Noted April 24.

★Ore., Portland—State Highway Comn. let contract building 8 rein.-con. bridges between McMinnville and Bellevue, on Yamhill-Nestucca Highway, Yamhill Co., to Yamhill Co. Court, McMinnville, $14,760; bridge over Rogue River at Rock Point near Gold Hill, Jackson Co., to Parker & Banfield, Columbia Bldg., $46,725. Noted June 5.

Cal., San Luis Obispo—Bd. Supervs. San Luis Obispo Co. received bids building rein.-con. bridge over Cayucos River, from W. Ledbetter Co., Pacific Electric Bldg., Los Angeles, $14,945, ($14,680 if concrete cylinders are used); F. Maino, San Luis Obispo, $15,000; Moore & Co., Santa Barbara, $15,799.

★N. B., Hampton—Dept. Pub. Wks., Fredericton, let contract building steel and concrete bridge here, to Smith & Merrithers, Fredericton. About $25,000.

★Que., North Temiskaming—Dept. Pub. Wks., Ottawa, let contract building superstructure of bridge over Quinze River here, to Hamilton Bridge Wks. Co., Ltd., Bay St., N. Hamilton, Ont. About $82,000. Noted May 1.

★Ont., Grand Valley—Town Council let contract building rein.-con. bridge, to Ritchie Co., Beamsville. About $20,000. Noted June 5.

★Ont., Guelph—Wellington Co. let contracts building three 20 ft. concrete span bridges, to C. Mattaine, Fergus, $6000; one 18 ft. concrete arch, to G. A. Gilson, Fordwick, $2000, and two 40 ft. concrete bridges, to E. Simmons, Drayton, $6000.

★Ont., Sarnia—Lambton Co. let contract building 2 steel and concrete bridges, to A. J. Kirkpatrick, Petrolea. About $35,000.

Structural Steel

BIDS DESIRED

N. C., Walnut Cove—See "Bridges."

Wash., Adna—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., South Hill—See "Bridges."

N. C., Dunn—See "Bridges."

Reinforced Concrete

PROPOSED WORK

N. Y., Buffalo—See "Industrial Works."

Mo., Jefferson City—See "Bridges."

Cal., San Francisco—See "Buildings."

Ont., Listowel—See "Industrial Works."

BIDS DESIRED

Pa., Reading—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., North Tonowanda—See "Industrial Works."

★Ala., Montgomery—See "Bridges."

O., Akron—See "Bridges."

★Mo., Millersburg—See "Bridges."

Mo., St. Louis—See "Bridges."

Mo., St. Louis—See "Miscellaneous."

Cal., San Luis Obispo—See "Bridges."

★Ont., Grand Valley—See "Bridges."

★Ont., Sarnia—See "Bridges."

Streets and Roads

PROPOSED WORK

Mass., Chicopee—City appropriated $15,500 to pave East St., $37,825 for West Main St., granite block, and $52,269 for Front St., vitr. brick. D. P. Coakley, mayor

R. I., Providence—City appropriated $20,000 bonds to pave Waterman St., granite block. W. F. Slade, comr. pub. wks.

N. J., Collingswood—City receives bids in August or September for paving, resurfacing and building concrete curbs and gutters. About $200,000. Remington & Vosbury, 601 Market St., Camden, consult. engrs.

N. J., Elizabeth—City soon lets contract building 5000 ft. bituminous concrete roadway on old and new macadam base, 22 ft. wide, on Springfield Ave. County Rd., New Providence Boro.

N. J., Jersey City—Bd. Freeholders Hudson and Essex Counties plan to repave Lincoln Highway between here and Newark, wood block. About $10,000.

N. J., Jersey City—City plans to improve West Side Ave., granite block. Cost will exceed $50,000. C. A. Van Keuren, city engr.

N. J., Jersey City—Hudson Co. Blvd. Comn. plans to improve Hudson Co. Blvd. from Communipaw Ave. to New York & New Jersey R.R. tracks, cost, $57,000; also between Paterson Plank Rd. and Hackensack Plank Rd., $150,000, both bituminous surface on concrete foundation.

N. J., Kearney—Town plans to pave Elm St., from Erie R.R. to Belleville Turnpike, granite block. About $10,000. H. P. Preimer, city engr.

N. J., Morristown—City soon receives bids improving Water St. from Spring St. to railroad. About $17,000. Plans include widening, draining and surfacing with Amiesite on 4 in. concrete base.

Pa., Canonsburg—Boro. soon lets contract grading, paving and curbing with concrete, Hawthorne St. from Belmont to Hutchinson Aves., Chartiers St. from West Pike to Boro. line, Hutchinson Ave. from West College to Hawthorne Sts., Van Eman St. from South Central Ave. to South Jefferson St. Work involves 4510 sq.yd. concrete, 850 lin.ft. concrete curbing and 1015 cu.yd. earth excav. H. M. Day, engr.

Pa., Phila.—Dept. Pub. Wks. rejected bids grading sections of Claridge, Northumberland, St. Vincent and Tabor Sts. New bids will be taken soon. Noted June 12.

Pa., Pittsburgh—City passed ordinance to grade, pave and curb McCandless Ave. from 53rd to 56th St., 38 ft. wide, $41,000; Bricelyn St. from Tokio St. to Wilkinsburg Ave., $33,000, Swope St. and Way from Ravenna St. to Alder St., $14,000, Stadium St. from Stafford to Radcliffe Sts., $9000, Sydney St. from South 24th to South 25th Sts., $13,000; also widen and change lines of Pioneer Ave. between Templeton St. and West Liberty Ave. T. Reed, City County Bldg., engr.

Pa., Scranton—City had plans prepared by W. A. Schunk, city engr., paving West Market St. from Brick to Hollow Aves., asphalt and stone block, 28 to 30 ft. wide. About $63,513.

W. Va., Clay—Comrs. Clay Co having plans prepared for 4 mi. Clay Court House-Wallback Rd., 20 ft. wide, involving 50,000 cu.yd. excav., also drainage structures. About $47,000. E. Carr, co. engr.

W. Va., Fairmont—Comrs. Marion Co. plan to build 1.4 mi. Fairmont-Grafton Pike, grading 26 ft. wide, surfacing 16 ft. wide, involving 5500 cu.yd. excav., 9000 sq.yd. concrete, 4155 sq.yd. concrete header and base course, 3635 sq.yd. brick pavement and drainage structures. About $59,000. S. B. Miller, Fairmont, engr.

W. Va., Fayetteville—Fayette Co. voted $125,000 bonds to improve roads in Mt. Cove Dist. J. McGrath, Fayetteville, engr. Noted May 8.

W. Va., Glenville—Comrs. Gilmer Co. soon let contract grading and draining 2 mi. Gilmer-Ripley & Ohio Turnpike. About $26,000. W. M. Moss, Glenville, engr.

W. Va., Hinton—Comrs. Summers Co., Pipestem Dist., voted $22,700 to build roads. J. D. French, Hinton, engr. Noted May 29.

W. Va., Moundsville—Comrs. Marshall Co. having surveys made for roads in Washington and Clay Dists. Election will be held in each district about Sept. 1 to vote on $200,000 bonds for work. S. H Bonar, Moundsville, engr.

Streets and Roads (Continued)

W. Va., Wayne—Comrs. Wayne Co. soon receive bids grading 3.2 mi. Armilda-Echo Rd. About $60,000. H. A. Levering, co. engr.

W. Va., Williams—Mingo Co. plans to build 4 mi. Marrowbone-Naugatuck Rd., 22 ft. wide, involving 60,000 cu.yd. excav.; also drainage structures. About $61,000. L. C. Linkus, Williamson, engr.

North Carolina—State Highway Comn. Raleigh, soon receives bids hard surfacing 11 mi. road, Alexander Co., 9 ft. wide, cost $66,000; 18 mi. Central Highway, 9 ft. wide, Carteret Co., $250,000, and 16 mi. Atlanta and Asheville Highway, Graham Co. W. S. Fallis, Raleigh, engr.

N. C., Monroe—Comrs. Union Co. soon receive bids top soiling and graveling county roads, 16-20 ft. wide. About $500,000. Engineer not selected.

N. C., Nashville—Nash Co. election July 12, to vote on $200,000 bonds to build road from Rocky Mount to here, also other roads.

S. C., Ft. Mill—City plans election to vote on $40,000 bonds to pave 2 mi. Main St., 30 ft. wide.

S. C., Greenwood — Comrs. Greenwood Co. plan to relocate, grade, drain and surface 7.29 mi. Dixie Highway from here to Hodges, 30 ft. wide. About $19,978. Application made for Federal aid. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Spartanburg—Comrs. Spartanburg Co. soon let contract grading, draining and surfacing with top soil 6.7 mi. Natl. Highway from here to Duncan, 30 ft. wide. Work involves 31,720 cu.yd. earth excav., 500 cu.yd. rock excav., and 28,628 cu.yd. top soil, etc. About $40,000. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

S. C., Union—Comrs. Union Co. plan to build roads in various sections of Bogansville Twp., about $70,000; also various roads in Jonesville Twp., about $65,000. Engineer not selected.

Ga., Decatur—DeKalb Co. election about Aug. 1 to vote on $500,000 bonds to build roads.

Ga., Griffin—Spaulding Co. voted $350,000 bonds to build roads. Federal Government will appropriate like amount. Noted May 1.

Ga., Jefferson—Jackson Co. voted $100,000 bonds to build roads. Federal Government will appropriate like amount. Noted Apr. 24.

Ga., La Grange—Troup Co. voted $500,000 bonds to build roads. Noted May 1.

Ga., Washington—City soon lets contract paving, draining and curbing 18,000 sq.yd. Main St. About $75,000. H. S. Jandon Eng. Co., Elberton, engrs.

Fla., Haines City—City having plans prepared by McElroy Eng. Co., engrs., Giddens Bldg., Tampa, paving Main St. About $120,000.

Fla., Kissimmee—City Comn. soon receives bids paving roads in south and east sections of city. About $30,000.

Ala., Albany—City Council employed Lund & Hill, engrs., 527 Southern Trust Bldg., Little Rock, Ark., to supervise laying pavements on principal streets. About $300,000.

Ala., Enterprise—City soon receives bids for 5000 sq.yd. vitr. brick paving. A. Pew, 501 Forsyth Bldg., Atlanta, Ga., engr.

Louisiana—F. M. Kerr, ch. engr. state highway dept., New Orleans, soon lets contract ditching and surfacing with gravel, 9.96 mi. New Orleans-Baton Rouge Highway, 30 ft. wide, Jefferson Parish. D. Buie, 736 Maison Blanche Bldg., New Orleans, engr.

Tenn., Maryville—Blount Co. having surveys made metaling 75 mi. and grading 66 mi. road. Bonds for $400,000 voted June 7, which with Federal and state aid to the amount of $400,000, will make $800,000 to be spent within next 3 years. D. W. Harmon, co. engr.

Ky., Cynthiana—City soon lets contract laying 3800 sq.yd. 1 course rein.-con. pavement. About $10,000. A. Gilley, city engr.

O., Cincinnati—City plans to grade, pave, set granite curbs, build retaining walls, cement sidewalks, drains, etc., on Moorman Ave. and McMillan St., asphalt, estimated cost, $15,130; grade, pave and build combined sanitary sewers in 700 ft. Haight Ave., from Bruce Ave. to first angle north, 50 ft. wide, rein.-con.; improve 4000 ft. Freeman Ave., from Kener St. to Central Ave., 50 ft. wide, granite (using old granite block where possible); also build 12-in. sewer from Liberty St. to point 185 ft. north and from Livingston St. to point 155 ft. north, and make necessary alterations to water distributing system; widen roadway 2 ft. on each side, set new and reset existing granite curb, pave with wood block, and make necessary alterations to water distributing system on McMillan St. from Gilbert Ave. to Alms Pl., $49,478. F. King, city engr.

O., Columbus — Comrs. Franklin Co. adopted resolution to sell $155,000 bonds for grading, building bridges and culverts and paving 2 mi. Harbor Rd. from Linden Heights to Granville Rd., 34 ft. wide, brick.

O., Dayton—City soon receives bids paving 1200 ft. Mt. Vernon Ave. from Fountain to Niagara Aves., 30 ft. wide, involving 4000 sq.yd. concrete, 2400 ft. concrete curbing and guttering and 12,000 sq.ft. 4-in. cement sidewalks. About $11,045. F. O. Eichelberger, city engr.

O., Piqua—City plans to issue $300,000 bonds to improve streets and sewers. E. Schroeder, city engr.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on concrete foundation, Amherst or Medina curbstone, Harper Ave., Sect. 2, from Montclair to Connors Aves., 30 ft. wide, cost, $27,214; Fairview Ave., from Charlevoix to Mack Aves., $26,813; Chapin Ave. from Seneca to Burns Aves., $4488; Fulton Ave. from Springwells Ave. to 150 ft. west of Wilkie Ave., 18,810; Homer Ave. from Springwells to Lawndale Aves., $22,176; Fenkell Ave., from 12th St. to Livernois Ave., $17,926, all 26 ft. wide; paving with 1 course concrete, East and West alley between La Salle Blvd., 14th St., La Mothe Ave. and La Salle Gardens, $4000; alley between Wilson, Byron, Atkinson and Edison Aves., both 20 ft. wide, $4920. C. W. Hubbell, city engr.

Mich., Detroit—City soon lets contract paving Harper Ave., Sect. 1, involving 3584 cu.yd. excav., 3003 lin.ft. curbstone, 4167 sq.yd. asphaltic concrete on 6 in. concrete base, etc.; also Alleys Nos. 1025, 1026, 1027, 1028, 1030, 1031, 1032, 1033, 1034, 1035, 1036, involving 5496 cu.yd. excav., 15,992 sq.yd. concrete, etc. Noted May 8 and June 12.

Mich., Hamtramck—Village receives bids about July 2, paving 2300 ft. Yemens Ave., 1300 ft. Mitchell Ave., 1100 ft. Norwalk Ave., 900 ft. Evaline Ave., and 1000 ft. Oliver Ave., rein.-con. with armor plate expansion joints; 1900 ft. Joseph Campau Ave., creosote block, brick, asphalt or asphaltic concrete. Noted May 29.

Illinois—State Highway Comn., Springfield, received no bids June 18, improving roads in Bond, Ford, Bureau, Lake, La-Salle, Livingston, Macoupin, Mason, Menard, Morgan and Shelby Counties. Noted June 5.

Ill., Silvis—City plans to pave 2nd Ave. from 8 th to 15th Sts., 9th St. from 1st to 4th Aves., both 24 ft. wide; 10th, 11th, 12th and 13th Sts., all from 1st to 2nd Aves., 14th St., from 1st to 3rd Aves., 15th St. from 1st to 4th Aves., all 22 ft. wide, also 5th, 6th and 7th Sts. W. Treichler, Rock Island, engr.

Wisconsin—State Highway Comn., Eau Claire, rejected bids received May 28, grading and paving Alma-Durand Rd., Federal Aid Project No. 16, A. R. Hirst, state highway engr. Noted May 15.

Wis., Black Earth—Village plans to pave, grade, build sewers, etc., in various streets, involving 13,360 sq.yd. concrete and 3670 cu.yd. earth excav. About $25,000. Parsons & Orbert, 627 M. and M. Bank Bldg., Milwaukee, engrs.

Wis., Milwaukee—Bd. Pub. Wks. soon lets contract paving 8th, 56th, 57th, 58th and Clinton Sts., Howell and Kinnickkinnic Aves., etc., involving 6435 sq.yd. hard sandstone block, 19,450 sq.yd. asphalt, 21,732 sq.yd. concrete, 1204 lin.ft. limestone, 1136 lin.ft. concrete curb, 1077 lin. ft. brick gutter, 6044 lin.ft. cement sidewalks and 10,176 cu.yd. earth excav. About $75,000. Noted June 12.

Wis., Plymouth—City plans to grade, pave and build concrete culverts on 2½ mi. Sheboygan-Fond du Lac Rd., 16 ft. wide, involving 9500 sq.yd. 2 course concrete. About $15,000. E. G. Phelps, City Hall, engr.

Wis., Racine—Racine Co. soon lets contract grading, paving and building concrete culverts on Main and Jefferson Sts. and Milwaukee Rd., 18 ft. wide, involving 16,941 sq.yd. concrete, 1830 lin. ft. curb and gutter and 4200 cu.yd. earth excav.

Wis., Sheboygan—City plans to grade and pave 3.9 mi. Center Ave. and 13th St., 18-20 ft. wide, involving 20,000-25,000 sq. yd. vitr. brick and 10,000 lin.ft. concrete curb and gutter. About $40,000. C. U. Boley, city engr.

Ia., Ottumwa—City soon lets contract for 47,300 sq.yd. pavement; rein.-con. or brick. H. A. Brown, city engr.

Minn., Bemidji—Comrs. Beltrami Co. postponed date for receiving bids for grading and graveling 16 mi. Federal Aid Project No. 76, 24 ft. wide. No definite date set. About $80,000. S. D. Snyder, Bemidji, engr. Noted May 22.

Minn., Elbow Lake—Comrs. Grant Co. rejected bids received June 17 grading and graveling 6 mi. Federal Aid Project No. 28, 24 ft. wide. About $30,000. Work will be readvertised. W. E. Burges, Elbow Lake, engr. Noted May 22.

Minn., Walker—Comrs. Cass Co. voted $250,000 bonds to build roads. C. D. Bacon, co. aud.

Kan., Burlington—City soon lets contract paving Neosho, Yuba, Juniatta, 2nd, 3rd, 4th, 6th and 7th Sts. Work involves 57,475 sq.yd. vitr. brick, 35,650 lin.ft. concrete curbing and guttering, 18,315 cu.yd. earth excav., 100 ft. 12 in. sewer pipe and 15 inlets. About $100,000. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs.

Kan., Caldwell—City soon receives bids for 60,000 yd. brick or asphalt pavement. Ruckel Eng. Co., Garden City, engrs.

Kan., Great Bend—City soon receives bids paving 10 blocks and repairing 5 blocks, brick or asphalt. Ruckel Eng. Co., Garden City, engrs.

Kan., Marysville—City soon receives bids for 25,000 sq.yd. vertical fibre paving and concrete curbing and guttering. C. McCrae, Republic Bldg., Kansas City, Mo., engr.

Kan., Seneca—City receives bids about July 10, paving various streets. About $200,000. Archer & Stevens, New England Bldg., Kansas City, Mo., engrs.

Mont., Billings—Yellowstone Co. election Sept. 2 to vote $250,000 bonds to build highways.

Mont., Boulder—Jefferson Co. election Sept. 2, to vote on $100,000 bonds to build roads. Federal aid will be asked if election carries. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Butte—Silver Bow Co. election Nov. 2, to vote on $500,000 bonds to build roads.

Mont., Deer Lodge—Powell Co. election Sept. 2 to vote on $100,000 bonds to build roads.

Mont., Great Falls—Cascade Co. election Sept. 2, to vote on $500,000 bonds to build Park-Park Highway and other roads. Federal aid will be asked if election carries. P. D. Pratt, c/o State Highway Dept., Helena, engr.

Mont., Hamilton—Ravalli Co. election Sept. 2 to vote on $100,000 bonds to build roads. L. Oertli, Hamilton, engr.

Mont., Hardin—Big Horn Co. election Sept. 2 to vote on $75,000 bonds to build roads. J. E. Graham, Hardin, engr.

Mont., Kalispell—Flathead Co. election Sept. 2 to vote on $75,000 bonds to build 5 mi. road. F. P. Scott, Kalispell, engr.

Mo., Bethany—Harrison Co. receives bids in July building 9.6 mi. road from north, east and west line of Bethany Twp., 9 ft. wide, concrete. M. G. Hall, Centerville, Ia., engr. Noted Feb. 13.

Mo., Boonville—Cooper Co. has retained Shockley Eng. Co., engrs., 740 Reserve Bank Bldg, Kansas City, to cooperate with county engineer in making surveys and plans for 20 mi. Federal aid roads extending about 7 mi. east, west and south from here. About $225,000 now available for project.

Mo., Carthage—Comrs. Joplin Special Rd. Dist., Joplin, receive bids about July building 6.1 mi. road from Joplin to Carl Junction, 18 ft. wide, concrete, Jasper Co. H. Shannon, Cunningham Bank Bldg., Joplin, engr. Noted Feb. 13 under "Joplin, Mo."

Streets and Roads (Continued)

Mo., Independence—Jackson Co. soon lets contract grading and paving 1225 ft. Prospect Ave., involving 2640 sq.yd. waterbound macadam; 613 ft. Brooklyn Ave., 18 ft. wide, 1300 sq.yd. waterbound macadam, 3000 cu.yd. earth and 100 cu.yd. rock excav.; 613 ft. Woodland Ave., 18 ft. wide, 1300 sq.yd. waterbound macadam and 800 cu.yd. earth excav. O. C. Sheeley Co., Independence, engrs.

Mo., Independence—Jackson Co. plans to build 3.1 mi. road from Lone Jack to Johnson Co. line, 16 ft. wide, bituminous macadam. O. C. Sheeley Co., Independence, engrs.

Mo., Kansas City—Bd. Pub. Wks. had plans prepared grading McGee St. from Admiral Blvd. to 9th St., and 8th St. from Grand to Oak Sts. About $66,000. R. W. Waddell, city engr.

Mo., Kansas City—City having plans prepared extending Linwood Blvd. from Robert Gillham Rd. west to Main St., also widening Gillham Rd. from 31st St. to Linwood Blvd., and Paseo St. south from Linwood to 37th Sts., 5 ft. on each side. R. W. Waddell, city engr.

Mo., Marshall—Comrs. Marshall Special Rd. Dist., Saline Co., receive bids in August building 8 mi. road from east to west side of district, 16 ft. wide, asphaltic macadam. W. B. Cauthorn, Columbia, engr.

Mo., New Madrid—New Madrid Co. receives bids in August building 19.5 mi. gravel road from Sikeston to New Madrid, 16 ft. wide. C. V. Hansen, New Madrid, engr.

Mo., Pleasant Hill—City having plans prepared paving 5400 ft. 1st St., 18 ft. wide, involving 9000 cu. yd. waterbound macadam and 1900 cu.yd. excav. About $11,000. Shockley Eng. Co., 740 Reserve Bank Bldg., Kansas City, engrs.

Mo., St. Charles—St. Charles Co. plans election soon to vote on $1,000,000 bonds to build roads. P. W. Loonam, St. Charles, engr.

Mo., St. Joseph—Buchanan Co. receives bids in July building 2.2 mi. road from St. Joseph to One Hundred and Two River, 18 ft. wide, asphaltic concrete. H. L. Meyer, co. highway engr.

Mo., St. Joseph—Buchanan Co. plans to build 11.2 mi. road from St. Joseph to Faucett, 16 ft. wide, brick on concrete base. H. L. Meyers, St. Joseph, engr.

Tex., Athens—Henderson Co. plans to surface with gravel and native rock pavement and build concrete drainage structures on 23.576 mi. State Highway No. 19, 15 ft. wide. Wilder & O'Neal, Chronicle Bldg., Houston, engrs.

Tex., Baird—Callahan Co. plans to rock or gravel surface, 34.85 mi. Highway No. 1 from Eastland Co. line to Taylor Co. line, 16 ft. wide, involving 69,625 lin. ft. machine grading, rein.-con. drainage structures, etc. About $6000 per mile.

Tex., El Paso—City election soon to vote on $525,000 bonds to pave and build sewers in various streets and improve waterworks.

Tex., Fairfield—Comrs. Freestone Co. plan to clear, grub, grade, drain, build macadam road with bituminous surface treatment on 10.04 mi. State Highway No. 7 from city limits of Teague to Limestone Co. line, 15 ft. wide. About $150,000. T. E. Huffman, c/o Bryant & Huffman, Austin, engrs.

Tex., Georgetown—Williamson Co. voted $1,500,000 bonds to build permanent highways. F. D. Love, co. judge. Noted April 3.

Tex., Houston—City voted $150,000 bonds to pave and improve streets.

Tex., Laredo—Webb Co. voted $300,000 bonds to build permanent highways. G. R. Page, co. judge. Noted May 29.

Tex., Orange—Comrs. Orange Co. plan to build roads and bridge over Sabine River. About $1,200,000.

Tex., Quitman—Comrs. Wood Co. plan to surface with iron ore gravel and build concrete drainage structures on 9.5 mi. State Highway No. 15, 14 ft. wide. About $50,000. Hess & Skinner, Southwestern Life Bldg., Dallas, engrs.

Tex., San Antonio—Bexar Co. voted $1,500,000 bonds to build roads. Federal Government will appropriate toward cost.

Ariz., Kingman—Mohave Co. election soon to vote on $250,000 bonds to build roads.

Wash., Kelso—City plans to pave 2 mi. streets, 16 ft. wide, and build concrete sidewalks.

Wash., Olympia—Thurston Co. soon lets contract clearing, grading and draining 8048 ft. Permanent Highway No. 8, 28 ft. wide, involving 15,680 cu.yd. earth excav. and 373 ft. concrete bridge. About $128,000. Former bids rejected. C. O. Mannes, co. engr.

Wash., Stanwood—City soon lets contract for 18,064 sq.yd. concrete pavement. F. G. Tegtmeier, Everett, engr.

Oregon—State Highway Comn., Portland, rejected bids received June 10 grading 2.7 mi. and macadamizing 7.7 mi. Yoncalla Rd., Douglas Co., involving 10,000 cu.yd. mixed excav., 16,000 cu.yd. rock surfacing, estimated cost, iron pipe, $79,575; also grading 13 mi. Unit No. 1, Service-Creek-Valdes Ranch Sect., John Day Highway, Wheeler Co., involving 91,000 cu.yd. excav., 12 mi. No. 3, 91,000 cu.yd. excav. No bids were received for 12.5 mi. Unit No. 2, 74,000 cu.yd. excav., and 11.5 mi. No. 4, 103,000 cu.yd. excav., estimated cost $500,000. Noted June 12.

Oregon—State Highway Comn., Portland, received no bids grading 6.7 mi. Forest Grove-Gaston Rd., Washington Co., involving 16,000 cu.yd. mixed excav. H. Nunn, Salem, state highway engr. Noted June 12.

Oregon—State Highway Comn., Salem, having surveys made by S. Clark & Libby. engr., c/o State Highway Comn., paving Junction City-Eugene Sect. Pacific Highway, Junction City Twp.

Ore., Klamath Falls—City plans to pave sidewalks and curbs on High St., bitulithic cement. About $60,000. J. Cleghorn, city engr.

Ore., Portland—City Council received no bids paving 77th St., S. E., from 65th Ave., S. E., to 55th Ave., S. E. G. E. Funk, city aud. O. Laurgaard, city engr. Noted June 12.

Ore., Portland—City voted to annex and plat 60 acre tract occupied by Peninsula Lumber Co., foot of McKenna St. O. Laurgaard, city engr.

Cal., Chula Vista—City receives bids in 2 or 3 months paving 4½ mi. 2nd and 3rd Aves., 2nd, E and F Sts. About $100,000. Former contract rescinded. E. M. Lynch, Central Bldg., Los Angeles, engr. Noted May 15.

Cal., Oakland—City soon lets contract improving Hopkins, East 37th, Kingsley and Emerson Sts., involving 6360 lin. ft. concrete curbing, 18,441 sq.ft. concrete gutter, 1196 sq.ft. cement sidewalk, 8964 sq.ft. grading, 5530 sq.ft. oil macadam, etc., $12,500; 85th Ave., 3954 lin.ft. redwood curbing, 11,409 sq.ft. concrete gutter, 3198 cu.yd. earth excav., 57,697 sq.ft. oil macadam, etc., $15,400.

Cal., Oakland—City plans to improve 87th Ave., involving 3703 lin.ft. redwood curbing, 10,596 sq.ft. concrete gutter, 73,736 sq.ft. grading, 50,154 sq.ft. oil macadam, etc. About $14,600.

Cal., Santa Cruz—Santa Cruz Co. voted $924,000 bonds to pave 40 mi. highway from Chittenden via Watsonville and Santa Cruz to Boulder Creek, concrete. Noted June 5.

Cal., Taft—City having plans prepared by E. M. Lynch, engr., Central Bldg., Los Angeles, improving streets, including grading, oiling and cement curbs and walks, cost, $197,000, or $144,000 if sidewalks are omitted.

Cal., Tracy—City election soon to vote on $15,000 bonds for paving street intersections.

Que., St. Victoire—Municipal Council plans to build 10 mi. waterbound macadam roads. About $33,000. E. Labitiere, Warwick, clk.

Ont., Alexandria—Town Council passed by law authorizing expenditure of $20,000 to build roads.

Ont., Hawkesbury—Town Council voted in favor of by-law for $75,000 to build asphalt and concrete pavements. V. A. Belanger, engr.

Ont., Lancaster—Town appropriated $100,000 bonds to build roads.

Ont., Ottawa—Ottawa Co. soon lets contract building 5 mi. Montreal and Ottawa Rd., east of Ottawa, 19 ft. wide, bituminous bound macadam. About $18,000. V. E. Belanger, L'Original, engr.

Ont., Williamstown—Twp. Council of Charlottenburgh appropriated $150,000 to build roads.

Ont., York—F. Barber, engr., 40 Jarvis St., Toronto, soon lets contract paving Oakwood and Lauder Aves., sheet asphalt on concrete base; Glenholme Ave. and Northcliffe Blvd., tarvia on concrete base, for town. About $50,000.

BIDS DESIRED

Me., Portland—Until July 2, by E. M. Hunt, comr. pub. wks., for 5375 sq.yd. split, redressed granite block pavement on Congress St., from Myrtle to India Sts.

Massachusetts—Until July 1, by State Highway Comn., Boston, building 4800 ft. bituminous gravel road, 18 ft. wide, in Dudley Twp., and 10,000 ft. macadam road, 18 ft. wide, in Quincy Twp. A. W. Dean, state highway engr.

New Jersey—Until July 9, by State Highway Comn., Broad St. Bank Bldg., Trenton, building State Highway Route No. 8, Sect. No. 1, Riverdale to Pompton River, Morris Co., involving 45,692 sq.yd. concrete surface, also State Highway Route No. 9, Sect. No. 3 Westfield Cutoff, Union Co., involving 1772 cu.yd. grading. A. L. Grover, ch. clk.

New Jersey—Until July 11, by State Highway Comn., Broad St. Bank Bldg., Trenton, building State Highway Route No. 13, Sect. No. 3, Three Mile Run to New Brunswick, Middlesex and Somerset Counties, involving 41,000 sq.yd. concrete surface. A. L. Grover, ch. clk.

N. J., Camden—See "Bridges."

N. J., Jersey City—Until July 8, by city, improving 10th St. between Erie and Grove Sts., old blocks on concrete base. About $10,000.

N. J., Newark—Until July 1, by city, improving Schuyler Ave. from Hawthorne Ave. to Nye St., involving 2250 sq.yd. pavement; Tremont Ave. from North Miem to Chelsea Ave., 820 sq.yd. pavement; Ridge St. from Beckley Ave., E., to Elwood Ave., 5600 sq.yd. pavement, all bitulithic on 6 in. concrete base; Elizabeth Ave., 3600 sq.yd. asphalt on old block pavement. M. P. Sherrard, city engr.

Pa., Carrolltown—Until July 2, by Town Council, furnishing labor and materials and building road from here to station, northeastern to western point of Main St. 18 ft. wide. F. A. Kline, Bank Bldg., Carrolltown, engr.

Pa., Gallitzin—Until July 2, by H. F. Conrad, boro. secy., 708 Hemlock St., furnishing labor and materials and paving 5000 lin.ft. Church St., 20 ft. wide, involving 6000 sq.yd. vitr. brick, 175 lin.ft. stone curb and 3000 cu.yd. earth excav. About $35,000. D. W. Dillman, Altoona Trust Bldg., Altoona, engr.

Pa., Palmerton—Until July 9, by A. C. Schaefer, boro. secy., improving streets. Work involves 12,830 cu.yd. excav. for roadway and curbing, 30,260 sq.yd. broken stone sub-base for all types of pavement, 30,260 sq.yd. cement concrete base course for brick and Amiesite pavement, 30,260 sq.yd. concrete brick and Amiesite pavement, 740 lin.ft. removal and renewal of old curbing, and 2890 lin.ft. concrete curbing; advertised in this issue.

W. Va., Fayetteville—Until July 14, by R. J. Stegall, clk. Fayette Co., grading 3 mi. highway from Fayette to Lansing, involving 45,000 cu.yd. excav. J. K. McGrath, engr.; advertised in this issue.

W. Va., Wheeling—Until June 30, by Ohio Co. Court, building 1 mi. National Pike, surfacing 20 ft. wide, grading 32 ft. wide, involvng 2300 cu.yd. excav., 11,730 sq.yd. pavement, etc. About $38,000. W. O. McClusky, Wheeling, engr. Noted June 5.

N. C., Clinton—Until July 1, by mayor, paving, draining and curbing 30,000 sq.yd. Main St. W. W. Pratt, Durham, engr.

N. C., Nashville—Until July 8, by L. T. Vaughan, town clk., building 1½ mi. streets, sidewalks and curbs on Washington and Depot Sts.; advertised in this issue.

S. C., Greenwood—Until July 3, by Greenwood Co. Highway Comn., relocating, grading, draining and surfacing with top soil, 7.20 mi. Dixie Highway, from here to Hodges Sect., 30 ft. wide; cost $19,977. J. R. Pennell, c/o State Highway Dept., Columbia, engr.

Streets and Roads (Continued)

Ga., Douglas—Until July 1, by G. A. Tanner, mayor, paving, curbing and building drainage structures on main streets, involving 22,000 sq.yd. pavement. About $75,000. O. H. Lang, Moultrie, engr.

Ga., Macon—Until July 1, by J. R. Bowdre, clk. Bibb Co., paving, building drainage system, headwalls and culverts, on 2 mi. Houston Rd., and 8.7 mi. Forsyth Rd., 18 ft. wide. About $250,000. S. R. Shi, Macon, engr.

Fla., Bronson—Until July 8, by Comrs. Levy Co., grading, paving and grubbing highway between Lukens and Sumner, involving 46,000 sq.yd. limestone surfacing, 13,000 cu.yd. grading and 18 acres clearing and grubbing. About $200,000. D. F. Thomas, Gainsville, engr. Noted Apr. 3.

Miss., Coffeeville—Until July 7, by Bd. Supervs. Yalobusha Co., improving following roads: 7½ mi. Banner Rd.; 2 mi. Pittsboro Rd., from Banner Rd. to Calhoun Co. line; 6 mi. Pine Valley Rd.; 4 mi. Cottner Rd.; 5½ mi. Water Valley and Shoales Rd., Beat 2; 7 mi. Coffeeville and Pontotoc Rd., Beat 2; 2 mi. Johnsey Rd. L. T. Wisdom, clk. Noted Feb. 27.

Miss., Mendenhall—Until July 3, by Highway Comn., Central Rd. Dist., Simpson Co., Magee, improving and building 8.0 mi. Federal and State Aid Rd. Work involves 9 acres clearing and grubbing, 44,000 cu.yd. grading, 6200 cu.yd. gravel, 75 cu.yd. concrete, 800 lin.ft. culvert pipe, 7.8 mi. sodding. X. A. Kramer, c/o State Highway Dept., Magnolia, engr.

La., Alexandria—Until July 7, by V. M. Ake, city secy., paving lower 3rd St. and others.

Tennessee—Until July 10, by State Highway Dept., 327 7th Ave., Nashville, building 10.66 mi. State Highway No. 7, between Cowan Sta. and Franklin-Marion Co. line, Franklin Co., involving 16,812 cu.yd. common and 1500 cu.yd. solid rock excav., 101,750 sq.yd. 8 in. waterbound macadam, 16 ft. wide, 8533 sq.yd. scarifying and reshaping, 520 lin. ft. 15-24 in. concrete or corrugated metal pipe, 61 cu.yd. Class "A" and 53 cu.yd. Class "B" concrete, 8600 lb. reinforcing steel and 120 cu.yd. stone masonry, also an additional 8500 cu.yd. excav., between Sta. 0-00 and Sta. 300; 12.7 mi. State Highway No. 7, between Shelbyville and Moore-Coffee Co. line, Bedford and Moore Counties, involving 29,716 cu.yd. common and 5935 cu.yd. solid rock excav., 1.76 mi. grader work, 12,000 sq.yd. 8½ in. waterbound macadam, 16 ft. wide, 102,500 sq.yd. 8 in. gravel surfacing, 16 ft. wide, 17,865 sq.yd. scarifying and reshaping, 1671 lin. ft. 15 and 25 in. concrete or corrugated metal pipe, 300 cu.yd. riprap, 28 cu.yd. "Special," 335 cu.yd. Class "A" and 110 cu.yd. Class "B" concrete, 36,000 lb steel and 2 rein.-con. bridges, involving 160 cu. yd. excav., 15 cu.yd. "Special," 97 cu.yd. Class "A" and 173 cu.yd. Class "B" concrete, and 15,000 lb steel. Alternate bids will be considered on 8½ in. waterbound macadam for the total 104,500 sq.yd. surfacing. W. P. Moore, ch. engr., advertised in this issue.

O., Columbus—Until July 2, by G. A. Borden, dir. pub. serv., grading, draining, curbing, repaving with asphalt and building brick gutters on 2241 ft. Atchison St. from 20th to Graham Sts., 24 ft. wide, grading, draining, curbing, paving with asphalt or brick and laying water mains in 2776 ft. Kelso Rd. from High St. to Indianola Ave., 32 ft. wide, H. A. Maetzel, city engr.

Ind., Indianapolis—Until June 30, by Bd. Pub. Wks., grading, paving and placing 4030 lin.ft. limestone curbing on 2037 ft. Corwell Ave., 24 ft. wide, cost, $29,437; resurfacing with wooden blocks, asphalt, bituminous concrete or brick 420 ft. Henry St., 24 ft. wide, $12,320; 2423 ft. New Jersey St., 40 ft. wide, $37,932; 840 ft. Alabama St., 60 ft. wide (except 18.08 car-tracks), $13,274; 510 ft. South Alabama St., 60 ft. wide, $11,723; 1800 ft. Ohio St., 60 ft. wide (except 18.8 for car-tracks). $31,293; 3291 ft. 13th St., 22 ft. wide, $15,428. F. C. Lingenfelter, 3025 Park Ave., engr. Noted June 19.

Mich., Ford—(Wyandotte P. O.)—Until July 5, by village, paving 3000 ft. Goddard Rd., 30 ft. wide, and 1400 ft. Hudson St., 24 ft. wide. Work involves 13,500 sq.yd. rein.-con. pavement and concrete curbs.

Illinois—Until July 9, by State Highway Comn., Springfield, improving Natl. Highway in following counties (Federal Aid): Fayette Co., 19,995 ft. Sect. G-15d, 16 ft. wide, involving 35,431 sq.yd. pavement, 14,466 cu.yd. excav., 170 cu.yd. concrete in culverts; 7800 ft. Sect. H-15d, 16 ft. wide, 13,867 sq.yd. pavement, 7157 cu.yd. excav., 48.6 cu.yd. concrete; 12,500 ft. Sect. 31, 16 ft. wide, 22,222 sq.yd. pavement, 8451 cu.yd. excav., 154 cu.yd. concrete; 27,800 ft. Sect. V, 16 ft. wide, 49,319 sq.yd. pavement, 18,189 cu.yd. excav., 137 cu.yd. concrete; 28,066 ft. Sect. O, 16 and 18 ft. wide, 54,069 sq.yd. pavement, 26,850 cu.yd. excav., 196 cu.yd. concrete; 14,237 ft. Sect. P, 16 ft. wide, 24,884 sq.yd. pavement, 27,863 cu.yd. excav., 100 cu.yd. concrete; Bond Co., 16,189 ft. Sect. F-15d, 16 ft. wide, 28,780 sq.yd. monolithic brick, 10,013 cu.yd. excav., 153 cu.yd. concrete; 11,998 ft. Sect. X, 16 ft. wide, 21,292 sq.yd. pavement, 9240 cu.yd. excav., 140 cu.yd. concrete; 18,825 ft. Sect. Q, 18 ft. wide, 31,810 sq.yd. and 2578 sq.yd. pavement, 17,517 cu.yd. excav., 189 cu.yd. concrete. 2900 lin.ft. of section consists of widening the present 10 ft. brick pavement with a strip of similar pavement 8 ft. wide. Alternate bids will be received for Portland cement concrete, 3 and 4 in. monolithic brick, bituminous concrete with or without binder course, (Spec. C1, C2, C3 or CT). C. Older, ch. highway engr.

Illinois—Until July 9, by State Highway Comn., Springfield, improving State Aid roads in following counties: Lee Co., 24,297 ft. Sect. F, Route 5, 16 ft. wide, involving 4319 sq.yd. concrete, 1140 cu.yd. excav., cost, $9184; 2675 ft. Sect. G, Route 5-A, 10 ft. wide, 2972 sq.yd. concrete, 1847 cu.yd. excav., $10,072;

Madison Co., 2700 ft. Sect. K, Route 1, 15 ft. wide, 4500 sq.yd. concrete, 2060 cu. yd. excav., $7557; 3250 ft. Sect. L, Route 8, 16 ft. wide, 5778 sq.yd. concrete, 2600 cu.yd. excav., $9632;

Morgan Co., 3259 ft. Sect. D, Route 1, 16 and 18 ft. wide, 5972 sq.yd. concrete, 1493 cu.yd. excav., $12,878;

Stephenson Co., 5144 ft. Sect. F, Route 1, 10 ft. wide, 5715 sq.yd. concrete, 3931 cu.yd. excav., $19,218;

Ford Co., 3100 ft. Sect. D, Route 1, 10 ft. wide, 3444 sq.yd. brick, 1161 cu.yd. excav., $14,971;

Jo Daviess Co., 7675 ft. Sect. G, Route 2, 26 ft. wide, 5881 cu.yd. excav., $6562; 4911 ft. Sect. H, Route 1, 26 ft. wide, 7078 cu.yd. excav., $6468;

Mercer Co., 8209 ft. Sect. L, Route 3, 26 ft. wide, 5173 cu.yd. excav., $7716; 5419 ft. Sect. M, Route 7, 26 ft. wide, all earth pavement, 7463 cu.yd. excav., $7646;

Kane Co., 3390 ft. Sect. N, Route 1, gravel, $1768;

Sangamon Co., 2371 ft. Sect. O, Route 1, 30 ft. wide, 16,802 cu.yd. excav., $8710;

Union Co., 8200 ft. Sect. F, Route 2, 22 ft. wide, 12,488 cu.yd. excav., $6740;

Tazewell Co., 39,042 ft. Sect. K, Route 1, 24 ft. wide, all earth pavement, 28,802 cu.yd. excav., $23,724;

Effingham Co., 4 bridges, Sect. H, Routes 3, 4, 10 and 13, $8440. C. Older, ch. highway engr.

Ill., Springfield—Until July 9, by C. W. Byers, clk. Sangamon Co., improving 23,561 ft. Sect. S-15d, Route 9, 16 ft. wide and 22,434 ft. Sect. R-15d, Route 5, 18 ft. wide. Cement will be furnished by county and alternate bids will be received for Portland cement concrete and monolithic brick pavement, 4 in. thick. F. Tarrant, 506½ East Monroe St., dist. engr.

Wis., Racine—Until July 12, by Bd. Pub. Wks., paving 17th St. from Wisconsin to Holborn Sts., involving 15,300 sq.yd. vitr. brick and 5770 lin.ft. cement concrete curb and gutter. About $50,000.

Wis., Sheboygan—Until June 30, by C. U. Boley, city engr., building concrete sidewalks and combined curb and gutter on Oakland Ave. to Georgia Ave., involving 3500 lin.ft. concrete curb and gutter and sidewalk.

Minn., Appleton—Until July 11 (change of date), by H. W. Steele, village clk., for 30,000 yd. pavement. About $100,000. J. W. Shaffer & Co., 403 New York Life Bldg., Minneapolis, engrs. Noted May 29.

Minn., Grand Rapids—Until July 14 (change of date), by Comrs. Itasca Co., grading and graveling 10 mi. Federal Aid Project No. 52, State Rd. No. 6, 18 ft. wide, involving 54 acres clearing, 54 acres grubbing, 36,390 cu.yd. excav., 8600 cu.yd. overhaul, culverts, surfacing, etc. About $50,000. Noted May 22.

Minn., Ivanhoe—Until July 14, by A. L. Swenson, aud. Lincoln Co., building 3 mi. Job No. 1902, State Rd. No. 5, 24 ft. wide, involving 4485 cu.yd. gravel, cost, $20,000; 16 mi. Job No. 1903, State Rd. No. 3, 3 mi. east of Hendricks, 24 ft. wide, 4700 cu.yd. gravel, $96,000. E. Haugan, Ivanhoe, engr.

Minn., Ortonville—Until July 6, by A. V. Randall, aud. Big Stone Co., grading and graveling 3 mi. Job No. 1807 State Rd. No. 6; also building bridges and culverts on Jobs Nos. 1908 and 1910, State Rd. No. 6; Job No. 1902, State Rd. No. 1; Job No. 1912, State Rd. No. 5, Job No. 1913, State Rd. No. 1; 24 ft. wide. About $30,000. L. P. Zimmerman, Ortonville, engr.

Minn., Worthington—Until July 14, by Comrs. Nobles Co., paving 5½ mi. and grading and graveling 24 mi. Federal Aid Project No. 58, 18-24 ft. wide. About $250,000. Former bids rejected. J. R. Boomer, Worthington, engrs. Noted June 19.

Kan., Ellsworth—Until July 7, by city, paving Douglas St. from H. L. Bridge to Smokey Hill River, involving 13,885 sq.yd. brick or asphaltic concrete. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs.

Neb., Lincoln—Until June 28, by City Clk., paving 4000 ft., 24th, Park and S Sts., 25 ft. wide, involving 9900 sq.yd. asphaltic concrete on 5-in. concrete base, 7200 lin.ft. concrete curbing and guttering, and 1300 cu.yd. earth excav. About $30,200. G. M. Bates, city engr.

Neb., Omaha—Until July 8, by City Council, paving and curbing Center St. from 10th to 20th Sts., 24-30 ft. wide, involving 9639 yd. paving if ordinary curb is used, 8845 yd. if combination curb and gutter is used and 6776 ft. curb, cost, $35,000; ½ mi. 18th St. from William to Castelar Sts., 24 ft. wide, 8190 yd. paving, (ordinary curb) 7372 yd. (combination curb and gutter), $30,000; ½ mi. 59th St. from Military Ave. to Pratt St., 24 ft. wide, 7024 yd. paving (ordinary curb) 6284 yd. (combination curb and gutter) 5185 ft. curb and 3000 yd. grading, $25,000; Dorcas St. from 10th to 16th Sts., 24 ft. wide, 5331 yd. paving (ordinary curb) 4844 yd. (combination curb and gutter) and 4022 ft. curb, $20,000; Curtis Ave. from 30th to 34th Sts., 24 ft. wide, 5602 yd. paving (ordinary curb) 5137 yd. (combination curb and gutter) and 3910 ft. curb, $20,000; 58th St. from Military Ave. to Bensonhurst, 23 ft. wide, 5371 yd. paving (ordinary curb) 4780 yd. combination curb and gutter and 4037 ft. curb, $20,000; ½ mi. 17th St. from William to Center Sts., 24 ft. wide, 4467 yd. paving(ordinary curb) 4048 yd. (combination curb and gutter) and 3147 ft. curb, $15,000; 27th St. from Cuming to Caldwell Sts., 20 ft. wide, 2586 yd. paving (ordinary curb) 2282 yd. (combination curb and gutter) and 2249 ft. curb, $10,000; ½ mi. 60th St. from Military Ave. to Pratt St., 24 ft. wide, 7696 yd. paving (ordinary curb) 7020 yd. (combination curb and gutter) and 5477 ft. curb, $30,000. J. A. Bruce, city engr.

N. D., Wahpeton—Until July 7, by city, paving, curbing and guttering Ohio and Montana Aves., 3rd, Wisconsin, Pembina, Ohio and Michigan Sts., Paving Dist. No. 1.

Mo., St. Louis—Until July 25, by Bd. Pub. Serv., paving and building granite curbing on 1038 ft. Itaska St. from Kingshighway to Brannon St., 30 ft. wide, bitulithic. About $15,000. W. W. Horner, city engr.

Mo., St. Louis—Until July 15, by Bd. Pub. Serv., paving and building granite curbing on 1500 ft. Neosho St., 26 ft. wide, bitulithic, estimated cost, $22,000; paving and granite curbing on 653 ft. Lombard St., 24 ft. wide, wood block, $11,000; paving and concrete curbing on 1250 ft. Brannon Ave., 30 ft. wide, bitulithic, $23,000. W. W. Horner, city engr.

Mo., St. Louis—Until July 8, by Bd. Pub. Serv., paving and building concrete curbing on 1650 ft. Prather Ave., vitr. brick, estimated cost, $29,000; paving and concrete curbing on 980 ft. Rosa and Hancock Aves., bituminous macadam, $11,000; paving and granite curbing on 620 ft. Elizabeth St., vitr. brick, $10,000; paving and concrete curbing on 1610 ft. Milentz Ave., vitr. brick; also 1150 ft. Milentz and Christy Sts., $15,000. W. W. Horner, city engr.

Streets and Roads (Continued)

Ark., Fayetteville—Until July 8, by W. J. Reynolds, secy. bd. rd. dist. No. 2, building 52 mi. gravel and limestone road. Work involves 11.5 acres clearing and grubbing, 155,282 cu.yd. unclassified and 5000 cu.yd. solid rock excav., 20 mi. grading machine work, 735 lin.ft. heavy steel and 760 lin.ft. light steel bridges, 33,752 cu.yd. field stone base, 16,138 cu.yd. limestone top course, 26,660 cu.yd. native gravel, 943 cu.yd. rein.-con. and 297 cu.yd. plain concrete, 1968 lin.ft. 15-30 in. concrete pipe, 20,000 sq.yd. scarifying and reshaping old macadam and 24,794 sq.yd. 2 in. bituminous macadam. Separate bids may be submitted for any or all of following items: concrete pipe, f.o.b. cars, Fayetteville; steel trusses and short spans, erected, bituminous top. Hamilton & Shreve, Fayetteville, engrs.; advertised in this issue.

Okla., Poteau—Until July 7, by O. S. Peorix, city clk., paving various streets and alleys, involving 23,000 cu.yd. grading, 30,000 sq.yd. oil macadam pavement, 65 catch basins, 7000 ft. vitr. pipe, 26,000 ft. concrete curb, 27,000 concrete gutter and 1100 ft. concrete header. J. E. Davis, Poteau, engr.

Okla., Yale—Until June 30, by city for 20,000 sq.yd. sheet asphalt pavement, 5000 lin.ft. concrete curbing, storm sewers, etc. C. F. Ford, clk. Noted June 5.

N. M., Raton—Until June 30, by P. Turner, city clk., paving and improving Cook and Park Aves., from 1st to 3rd Sts.; 1st and 2nd Sts., from Rio Grande to Savage Aves., involving 26,887 sq.yd. Topeka or bitulithic pavement, 6661 lin.ft. concrete curb and gutter, 546 lin.ft. concrete alley returns, and 4000 sq.yd. concrete alley pavement; advertised in this issue.

Idaho, Pocatello—Until July 3, by P. J. Phelan, city clk., for 37,000 sq.yd. pavement in Impvt. Dist. No. 23.

Washington—Until July 7, by State Highway Bd., Olympia, improving by grading, clearing, draining and paving 6.4 mi. Sunset Highway from Renton to May Valley, Permanent Highway No. 21, concrete, King Co.; 3.2 mi. Sunset Highway from Waterville west, crushed rock, Douglas Co.; 7.8 mi. Central Washington Highway from Cheney west, crushed rock, Spokane Co.; to Bear Rivers, Pacific Co.; 2.6 mi. Ocean Beach Highway from Nasel to Bear Rivers, Pacific Co.; 12 mi. Navy Yard Highway from Union City to Holyoke Creek, gravel, Mason Co.; 3.6 mi. Pacific Highway from Bellingham south, concrete, Whatcom Co.; 4.6 mi. Navy Yard Highway from Holyoke Creek to Clifton, gravel, Mason Co. J. Allen, state highway engr.

Wash., Port Angeles—Until July 7, by Comr. Clallam Co., grading and graveling 7.3 mi. Permanent Highway No. 7 near Pysht. J. W. Blackwood, Port Angeles, engr.

Ore., Hillsboro—Until July 1, by E. L. McCormick, city recdr., for 6000 lin.ft. concrete curbing, 25,000 sq.yd. concrete pavement and 5000 cu.yd. excav. R. W. Jones, city engr. Former bids rejected. Noted June 5.

Cal., Oakland—Until July 7, by Bd. Supervs. Alameda Co., grading, paving with 5 in. concrete and building culverts and bridges on 1¼ mi. county road, 18 ft. wide. About $160,000. P. A. Haviland, Courthouse, engr.

N. S., Lunenburg—City receiving bids for 4000 yds. bituminous top paving with concrete base and 1500 yd. concrete sidewalks. G. H. Love, engr.

Que., Montreal—Until July 6, by city, paving 3800 ft. Cote des Neyes Rd. from Sherbrooke to St. May St., 50 ft. wide, involving 21,420 sq.yd. granite block. About $153,987. A. E. Doucet, city engr.

Que., Montreal—Until July 2, by Bd. Pub. Wks., paving 3 mi. lanes, 16 ft. wide. About $18,475. A. E. Doucet, city engr.

Que., St. Tite—Until July 1, by J. Clouthier, secy. municipal council, building 3 mi. waterbound macadam road. About $12,000.

Ont., Sandwich—Until June 30, by R. W. Code, engr., Bd. Trade Bldg., Windsor, building 15 mi. macadam roads for town. About $123,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Maine—State Highway Comn., Augusta, let contract grading, draining and bituminous macadam surfacing, state aid highways, beginning at Mill St. and extending along Pleasant St. 3011 ft., to Main St., Brunswick Twp., to Small & Ingalls Co., Bar Harbor. About $20,891. Noted June 12.

Massachusetts—State Highway Comn., Boston, received bids June 18, building 15,400 ft. bituminous macadam road, 18 ft. wide, Tewksbury Twp., involving 70,000 gal. butuminous macadam and 12,200 cu.yd. earth excav., from G. Grenough, South Acton, $66,375; W. B. MacIntosh, Wilmington, $67,834; Cenedella & Sons, Milford, $71,140. Noted June 12.

Massachusetts—State Highway Comn., Boston, received bids June 18, building 23,500 ft. road, Hancock Twp., involving 9500 cu.yd. concrete, 10,000 cu.yd. excav., from C. B. Lindholm, Pittsfield, $169,450; Davis & Brock, Boston, $170,010; Cordar & Montague, Pittsfield, $170,175; 12,800 ft. road, Braintree Twp., 4600 cu.yd. concrete, 9000 cu.yd. earth excav., from Cenedella & Son, Milford, $72,316; W. F. Loud & Sons, Quincy, $73,564; D. M. Biggs, Boston, $75,837. Noted June 5.

Mass., Brighton (Boston P. O.)—Comr. Pub. Wks. received bids June 16, paving Cambridge St., involving 20,550 sq.yd. asphalt on 6 in. concrete base, from Warren Bros., Berkeley St., Boston, $62,563; Central Constr. Co., School St., Boston, $66,265; Bermudez Co., Cambridge, $66,742.

★Conn., Waterbury—City let contract paving 18,797 sq. yd. various streets, Warrenite asphalt, to Warren Bros. Co., 173 Berkeley St., Boston, cost $61,754; 1235 sq. yd., to Barbara & D'Aurio, 63 Bank St., $7225; block pavement, concrete, 3873 sq. yd., to Connecticut Hassam Paving Co., 902 Chapel St., New Haven, $10,805.

New York—State Highway Comn., Capitol, Albany, received bids June 17, improving highways in following counties: (a1) Chenango Co., Greene-Oxford, Part 1, Rd. No. 8001; (a2) Greene-Oxford, Part 2, Rd. No. 8002;

(b) Erie Co., Marilla-Wales Center, Rd. No. 5633;

(c) Essex Co., Westport-Elizabethtown, Rd. No. 1496;

(d1) Fulton Co., Bull Run-Bleecker, Rd. No. 1376; (d2) Oppenheim-Dolgeville, Rd. No. 5626; (d3) Akin-Johnstown, Part 2, Rd. No. 8006;

(e1) Onondaga Co., Baldwinsville-Plainville, Rd. No. 1507; (e2) Scott-Borodino, Part 1, Rd. No. 1519;

(f1) Rensselaer Co., Riders Mills-Brainard, Rd. No. 1521; (f2) Stone Schoolhouse-North Petersburg-Vermont State Line, Rd. No. 1424;

(g) Cattaraugus Co., Machias-Delevan, Part 1, Rd. No. 5608;

(h) Nassau Co., Little Neck-Old Westbury, Part 2, Rd. No. 5280; also repairing roads in following counties: (i) Fulton Co., Rd. Nos. 110 and 247, Repair No. 1226;

(j) Herkimer Co., Rd. No. 456, Repair No. 1226;

(k1) Monroe Co., Rd. No. 010, Repair No. 1229; (k2) Rd. Nos. 5, 94, 538, 573, 674 and 1337, Repair No. 1230;

(l) Montgomery Co., Rd. No. 303, Repair No. 1227;

(m) Oneida Co., Rd. No. 1159, Repair No. 1228;

(n) Westchester Co., Rd. No. 20, Repair No. 1219, from Morrison & Quinn, Inc., Cutler Bldg., Rochester, (a1) $218,672, (a2) $231,357, (e1) $248,911;

McArthur Bros., 120 Bway., New York City, (a1) $239,206, (a2) $254,424;

Cold Spring Constr. Co., Buffalo, (b) $193,409;

F. I. Foote, Nunda, (b) $198,682;

J. S. Stabell, Inc., 1127 Niagara St., Buffalo, (b) $202,450;

Kennedy Contg. Co., Inc., Albany, (c) $195,965;

Dale Eng. Co., Mann Bldg., Utica, (c) $108,749, (d2) $99,849;

J. B. Dower, Ballston Spa, (c) $208,606;

T. Grady, Rochester, (d1) $62,859; (e2) $89,924;

Rosoff Eng. Co., 15 Park Row, New York City, (d1) $63,203, (d2) $103,336;

Bleecker Twp. Bd., Bleecker, (d1) $63,323;

F. V. Brotsch Co., E. & B. Bldg., Rochester, (d2) $101,824;

Harradine Bros. Co., Inc., Spencerport, (d3) $31,568, (e2) $89,052;

J. A. Jova, Inc., Roseton, (d3) $31,733;

J. P. Dugan Co., Inc., 32 James St., Amsterdam, (d3) $32,018, (1) $33,627;

Pathfinder Constr. Co., Fulton, (e1) $225,984;

J. H. Corbett & Sons Co., Union Arcade, Pittsburgh, Pa., (e1) $240,003;

J. H. Gordon, 42 North Pearl St., Albany, (e2) $86,724;

Gifford Constr. Co., Jamaica, (f1) $36,401;

Troy Contg. Co., Troy, (f1) $39,004, (f2) $121,279;

M. Fitzgerald, Hoosick Falls, (f2) $122,148;

Rossney Contg. Co., Buffalo, (g) $38,967;

I. M. Luddington Sons, Inc., Powers Bldg., Rochester, (g) $43,494;

E. T. Eggleston, Yonkers, (h) $44,541, (n) $18,801;

H. T. Bell, Bayside, (h) $45,328

N. W. Ryan, 15 Broad St., New York City, (h) $45,460;

Oltarsh Eng. Co., New York City, (i) $25,261;

G. N. McGinney, Gloversville, (i) $25,505;

T. F. Murray, Leroy, (j) $25,010;

A. F. McConville, Ogdensburg, (j) $25,817;

L. D. Sullivan, Inc., Utica, (j) $25,923, (m) $5617;

Ribstein-Holter Co., Inc., 16 State St., Rochester, (k1) $36,536;

H. W. Roberts Co., Inc., 610 Lansing St., Utica, (k1) $39,825;

Whitmore-Rauber & Vicinius, 279 South Ave., Rochester, (k1) $44,472, (k2) $14,074;

Good Roads Eng. & Contg. Co., Portchester, (n) $20,297;

Greenwich Contg. Co., Inc., New York City, (n) $20,427. Noted May 29.

★N. Y., Brooklyn—E. Riegelmann, boro. pres., let contract regulating, grading, curbing and laying sidewalks on East 38th St., to J. Massio, $4315; 51st St., to Grimm Constr. Co., 460 Herold Ave., Richmond Hill, $4435; 47th and 51st Sts., to Uvalde Asphalt Paving Co., 1 Bway., New York City, $42,426 and $10,681, respectively. Noted June 19.

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids June 18, resurfacing with asphalt by heater system roadways of (a) Calyer St. from Manhattan Ave. to Leonard St., regulating and repaving with asphalt on 6-in. concrete base; (b) Cortland St. from Neptune Ave. to Sheepshead Bay Rd., with granite on 6-in. concrete base; (c) 1st St. from 52nd to 53d Sts., from Cranford Co., 52 9th St., (a) $99,163, (b) $12,985; Borough Asphalt Paving Co., 1301 Metropolitan Ave., (a) $107,719, (b) $13,362; Uvalde Asphalt Paving Co., 1 Bway., New York City, (a) $111,085, (b) $13,394; Sicilian Asphalt Paving Co., 41 Park Row, New York City, (b) $12,279; M. J. O'Hara, 1228 Park Ave., New York City, (c) $5037; J. D. Norton, (c) $5458.

★N. Y., Gilboa—Bd. Water Supply, Municipal Bldg., New York City, let contract clearing, grading, draining, building culverts and guard rails on 7.75 mi. road around Schoharie reservoir in Gilboa and Conesville Twps., Schoharie Co., Prattsville Twp., Greene Co., and Roxbury Twp., Delaware Co., Contr. 202, to Schunnemunk Constr. Co., Highland Mills, $176,700. Noted June 19.

★N. Y., Ithaca—Common Council let contract paving Neaga Ave., Dryden Rd. and portions of East Seneca and Cascadilla Sts., bitulithic, to Warren Bros., 142 Berkeley St., Boston, $34,489; Stewart Ave., Prospect, Clinton and Westport Sts., to P. D. Conley, Ithaca, $67,446.

★N. Y., New York—Armory Bd., at office of J. F. Hylan, mayor, City Hall, let contract removing curb, extending concrete sidewalks and laying concrete foundations for floor in drill hall of 8th Coast Artillery Corps. Armory, Jerome Ave. and Kingsbridge Rd., Bronx Boro., Contr. No. 1, to F. Roeber, 507 5th Ave. About $13,150. Noted June 12.

★N. Y., New York—F. L. Dowling, pres. Manhattan Boro., let contract regulating and repaving with granite block on concrete foundation, roadway of Moore St., West Bway., William and Center Sts., to M. J. O'Hara, 1228 Park Ave., $6616, $80,342, $5429, and $19,329, respectively; Theatre St., to Asphalt Constr. Co., 2197 Madison Ave., $4250; Walker St., to W. J. Fitzgerald, 547 West 45th St., New York City, $494; Madison St., to Davney Asphalt Paving Co., foot Quinby Ave., $57,608. Noted June 12.

★N. Y., New York—F. L. Dowling, pres. Manhattan boro., let contract regulating and repaving with granite block on concrete foundation, roadway of James Slip and Leroy St., to W. J. Fitzgerald, 547 West 45th St., $18,977 and $25,300 respectively; with sheet asphalt, Wall St., to Sicilian Asphalt Paving Co., 41 Park Row, $21,564; 79th St., to J. L. Brusstar, Harlem River and 150th St., $43,922; Bway., to Asphalt Constr. Co., 2197 Madison Ave., $47,669. Noted June 19.

Streets and Roads (Continued)

★**N. Y., New York**—L. Nixon, supt. pub. wks., Capitol, Albany, let contract paving barge canal terminals, Pier 6, East River, Contr. 52-P, to Sicilian Asphalt Paving Co., 41 Park Row. About $11,225. Noted June 12.

N. Y., New York—Park Bd., Municipal Bldg., received bids June 19, for labor and material for paving and repaving with asphaltic mastic, walks of Central and other parks in Manhattan Boro., from Sicilian Asphalt Paving Co., 41 Park Row, $12,265; F. Roeber, 507 5th Ave., $12,690; D. J. Skelton, $13,000. Noted June 12.

★**N. Y., S. I., St. George**—C. D. Van Name, pres. Richmond Boro., let contract repairing with wood block, roadways of Richmond and Castleton Aves., to J. A. Johnson & Sons, West New Brighton. About $14,900. Noted June 5.

★**N. J., East Orange**—Bd. Freeholders Essex Co., (Newark), let contract paving Grove St. from Central Ave. here to Newark-Irvington line, bitulithic on 6 in. concrete base, to Northern Constr. Co., 665 Broad St., Newark, $60,761.

★**N. J., Irvington**—Village let contract improving 11,800 sq.yd. Union Ave., from Springfield to Mt. Vernon Aves., 2 x 5 x 12 in. "Hastings" asphalt blocks, to J. Dorer, Irvington, $56,669. Noted June 12.

N. J., Jersey City—City received lowest bid improving Hutton St. from Liberty Ave. to Hudson Blvd. from W. T. S. Crichfield, Washington St., Hoboken, 120% of standard price. Noted June 12.

★**N. J., South Orange**—Village let contract improving with "Hastings" asphalt blocks 2.5 x 5 x 12 in., 9300 sq.yd. Valley St. from South Orange Ave. to South Village line, to L. Batt, South Orange, $48,024; 4470 sq.yd. Irving Ave. from Centre St. to Grove Rd., 2 x 5 x 12 in., to J. Selitto, South Orange, $24,246. Noted June 12.

Pennsylvania—State Highway Dept., Harrisburg, received bids building roads in counties as follows:

Blair Co., 23,075 ft. repair work (13,075 ft. to be repaired with bituminous surface course 8-14 ft. wide), Logan Twp., from Eastern Paving Co., Colonial Trust Bldg., Phila., $27,200, Warren Bros. Co., 142 Berkeley St., Boston, $29,410; 890 ft. rein.-con., Gaysport Boro., from Standard Contg. Co., Altoona Trust Bldg., Altoona, $5672.

Bradford Co., 6640 ft. concrete, Athens Twp., from Valley Constr. Co., Athens, $38,541, T. M. Gill Co., Binghamton, N. Y., $38,891, W. J. Gephart, Pittsburgh, $39,743.

Cambria Co., 32,185 ft. rein.-con. and Hillside vitr. brick, Jackson Twp., from Nicola Bldg. Co., Penn and Denniston Aves., Pittsburgh, $259,954, Claiborne, Johnston Co., 910 Garrett Bldg., Baltimore, $378,174.

Centre Co., 27,940 ft. bituminous surface course on concrete foundation or rein.-con., Boggs Twp., from Vipond Constr. Co., 2222 Beale Ave., Altoona, $215,711, Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, $219,951, Winston & Co., 240 Fair St., Kingston, N. Y., $232,220.

Chester Co., 2932 ft. bituminous surface course on concrete foundation or rein.-con., Oxford Boro., from Juniata Co., Empire Bldg., Phila., $21,602, Sutton Contg. Co., Phila., $22,231, D. E. O'Connell & Son, Norwood, $23,972.

Cumberland Co., 24,275 ft. rein.-con. and Hillside vitr. brick, Upper Allen Twp., from Langthorne Co., Inc., New York City, $181,605, Hamilton-Kapncke Co., Phila., $181,642, Bennett & Randall, Lebanon, $192,758.

Crawford Co., 9067 ft. rein.-con., Woodcock and Hayfield Twps., from Keystone Constr. Co., Meadville, $62,626, Highway Constr. Co., Erie, $63,953, Mason, Hilton Co., 120 Liberty St., New York City, $85,813.

Erie Co., 27,049 ft. bituminous surface course on concrete foundation and Hillside vitr. brick or rein.-con., Mill Creek and Fairview Twps., from Gaylord International Eng. & Contg. Co., Mears Bldg., Scranton, $255,513, H. Schenk Co., 12th and Sassafras Sts., Erie, $281,537, Foundation Co., 233 Bway., New York City, $283,362; 4854 ft. bituminous surface course on concrete foundation and vitr. brick, Gerard Boro. and Twp., from Mayer Bros. Constr. Co., Commerce Bldg., Erie, $86,634, Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, $97,227, Warren Bros. Co., 142 Berkeley St., Boston, $101,949; 20,200 ft. rein.-con., Wayne Twp., from Highway Constr. Co., Erie, $136,532, Keystone Constr. Co., Meadville, $141,388, Campbell Bros. Co., Stambaugh Bldg., Youngstown, O., $153,306.

Lancaster Co., 37,684 ft. bituminous surface course on concrete foundation or rein.-con., East and West Hempfield Twps., from Freeland Constr. Co., Freeland, $247,273, W. H. Gawl, (J. Gawl & Co), Phila., $247,804, Ambler-Davis Co., Harrison Bldg., Phila., $252,154.

Lycoming Co., 39,319 ft. rein.-con., Platt and Woodward Twps., from W. J. Gephart, Pittsburgh, $322,531, Langthorne Co., Inc., New York City, $329,919, Bullock Constr. Co., Hazelton, $355,135.

Mercer Co., 3678 ft. bituminous surface course on concrete foundation or rein.-con., from Brackenridge Sand & Gravel Co., Brackenridge, $44,168.

Potter Co., 26,400 ft. bituminous surface course on concrete foundation or rein.-con. Eulalia and Potter Twps., from L. H. Gipp, Buffalo, N. Y., $218,918, Horn & Devling, Main St., Galeton, $222,743, Lesher & Roess, 700 West Front St., Oil City, $232,267.

Warren Co., 6544 ft. rein.-con., Youngsville Boro., from J. McCormick & Bro., Erie, $39,907, M. Dolan, Jamestown, N. Y., $47,659, Ridelsperger & Savage, Warren, $48,716.

York Co., 40,712 ft. bituminous surface course on concrete foundation and Hillside vitr. brick or rein.-con. and Hillside vitr. brick, Carroll and Franklin Twps., from Langthorne Co., Inc., New York City, $297,908, Mason & Hanger Co., Chambersburg, $319,702, Caliborne, Johnston Co., Inc., 910 Garrett Bldg., Baltimore, $333,746. Noted May 29.

★**Pa., Phila.**—Dept. Pub. Wks. let contracts improving streets as follows: (Schedule A) grading (1) 1670 cu.yd. streets, (2) Romana Ave. from N. E. Blvd. to Adams Ave., (3) Windsor Ave., (4) 74th Ave. from Alsop St. to Washington Lane; (Schedule C) asphalt paving assessment work, (1) Lindle Ave., (2) Spring St., (3) Vaux St., (4) 6th St., (5) 68th St.; (Schedule D) asphalt repaving, (1) Clementine St., (2) Fairmount Ave., (3) Lippincott St., from Kensington to Jasper Sts., (4) Lippincott St., from Amber St. to Pennsylvania R. R.; (Schedule E) wood block repaving, (1) Carpenter St. from 6th to 7th Sts., (2) Carpenter St. from 8th to 10th Sts., (3) Marlborough St., (4) Richmond St.; (Schedule J) furnishing and delivering fuel oil, to M. J. McCrudden, 805 Franklin Trust Bldg., (a1) $14,293; T. L. Flanagan, 1204 East Montgomery St., (a2) $744; E. A. Mullen, 5512 Vine St., (a3) $363; F. Mack Constr. Co., 2820 North 21st St., (a4) $6963; Barber Asphalt Paving Co., 239 North 30th St., (c1) $20,632, (c2) $2325, (c3) $3766, (c4) $7940, (c5) $3970, (d1) $3831, (d3) $3878, (d4) $1915; Eastern Paving Co., 401 Colonial Trust Bldg., (d2) $23,460; J. Meehan & Son, 915 West Dauphin St., (e1) $7352, (e2) $7628; J. J. McHugh, 1430 South Penn Sq., (e3) $2938, (e4) $2938, Atlantic Refining Co., 3144 Passyunk Ave., (j) $1520. Noted June 12.

Pa., Pittsburgh—Allegheny Co. received lowest 3 bids improving 5280 ft. McCoy Rd., 16 ft. wide, involving 9650 sq.yd. vitr. brick 650 cu.yd. concrete base, 9000 sq.yd. scarified surface, 6000 ft. 6-in. underdrain and 2000 cu.yd. earth excav., from J. H. McQuaide & Sons, Bakewell Bldg., $46,040, M. Ott & Co., 414 Warrington Ave., $48,224, J. B. Reed and F. Bryan, McKee's Rocks, $49,310; also rebuilding 3 mi. Bull Creek Rd., Fawn Twp., 18 ft. wide, 900 sq. yd. vitr. brick, 31,100 sq.yd. rein.-con. paving, 4500 cu.yd. earth excav., 1100 sq.yd. concrete foundation, 26,200 ft. 4 and 6-in. underdrains, 25,000 sq.yd. scarified surface, from Booth & Flynn, 1942 Forbes St., $91,834 (Telford base), $104,254 (concrete base); T. Cronin Co., South 17th and Muriel Sts., $94,377 (Telford base), $106,977 (concrete base); M. O'Herron Co., South 1st and McKean Sts., $96,844 (Telford base), $106,744 (concrete base). Noted May 22.

★**W. Va., Hinton**—Summers Co. let contract grading and draining 5 mi. Jumping Branee Rd., 20 ft. wide, to J. H. Henning, Charleston, $43,815. Noted June 19.

W. Va., West Union—Comrs. Doddridge Co. received only bid building 7 mi. Northwest Turnpike, Federal Aid Project No. 20, 14 ft. wide, concrete, involving 4500 cu.yd. excav., from Cisler & Morse, Marietta, O. About $25,200.

★**W. Va., West Union**—Comrs. Doddridge Co. let contract building 3 mi. Northwestern Turnpike, grading 26 ft. wide, surfacing 16 ft. wide, concrete, to Cisler & Morse, Marietta, O. About $86,000. Noted June 12.

★**Ga., Griffin**—City let contract paving 3 mi. streets with vitr. brick, to Pittman Constr. Co., Rhodes Bldg., Atlanta, $18,922.

★**Fla., Jacksonville**—Comrs. Duval Co. let contract paving here Turner Rd., Riverside, McDuff, and Myrtle Aves., to Wilson Constr. Co., Clark Bldg., South Jacksonville, $1.69 per yard. Noted May 29.

★**Ohio**—State Highway Comn., Columbus, let contracts building roads in following counties:

Delaware Co., Sect. "A-2," Delaware-Marysville Rd., 2.85 mi. grading, constructing bridges and culverts and paving with bituminous macadam, A. W. Burns, 55 East State St., Columbus, $57,202.

Sect. "B," Delaware-Marysville Rd., 5.02 mi. grading, constructing bridges and culverts and paving with bituminous macadam, A. B. Shaw, Delaware, $100,887.

Geuaga Co., Sect. "A," Cleveland-Kent Rd., .94 mi., resurfacing with 3 in. bituminous macadam, J. C. Devine Co., Alliance, $10,599.

Huron Co., Sect. "O," Oberlin-Norwalk Rd., 1.28 mi., grading and paving with monolithic brick, A. J. Baltes, Norwalk, $48,672.

Lorain Co., Sect. "C-2," Ashland-Oberlin Rd., 3.29 mi., grading, widening pavement and resurfacing with bituminous macadam, Hart & Kemp, Elyria, $39,095.

Montgomery Co., Sect. "D," Dayton-Chillicothe Rd., 2.63 mi., grading berms and ditches, constructing drainage structures reshaping present road and paving with plain concrete, Williams & Little Co., 11,810 Saywell Ave., Cleveland, $57,665.

Ottawa Co., Sect. "J" and "K-3," Toledo-Elmore Rd., 7.15 mi., grading and paving with concrete, Williams & Little Co., $223,428.

Sect. "F," Oak Harbor-Genoa Rd., 1.99 mi., grading and paving with concrete, Barnes & Tobbirt, Rocky Ridge, $54,236.

Sect. "D," Oak Harbor-Genoa Rd., 3.56 mi., grading and resurfacing with bituminous macadam, Wise Bros. & Berman, Elmore, O., $32,802.

Sandusky Co., Sect. "J," Fremont-Bellevue Rd., 5.76 mi., grading, constructing drainage structures and paving with brick, Modern Constr. Co., Fremont, $333,000.

Trumbull Co., Sect. "M," "E-1," "E-2," "C" and "D," Youngstown-Warren Rd., tar surface treatment, Amer. Tar Products Co., 1359 Logan Ave., Youngstown, $10,456.

Union Co., Sect. "B-1," Marysville-Kenton Rd., 2.88 mi., grading, constructing bridges and culverts and paving with waterbound macadam, C. O. Hurd, Marysville, $41,109. Noted June 19.

★**O., Cleveland**—City let contracts, to Cleveland Trinidad Paving Co., The Arcade, paving East 137th St., from Livingston to Abell Aves., cost $13,262; Southington Rd. from Livingston Rd. to city limits, $11,669. Noted June 5.

O., Dayton—City received bids paving 2000 ft. 3rd St. from Perry to St. Clair Sts., 60 ft. wide, involving 13,400 sq.yd. (a) oil A, (b) oil B wood block, 4200 lin.ft. granite curbing and 2000 sq.ft. cement sidewalks, from E. D. Murray, 18 Cambridge Ave., (a) $93,304, (b) $91,964; E. Ryan, Cincinnati, (a) $97,031, (b) $95,021; Finke Eng. Co., 15 South St. Clair St., $95,124. Noted June 19.

★**O., Dayton**—Montgomery Co. let contract building 2.64 mi. Xenia Pike, concrete, to Williams & Little, 11810 Saywell St., Cleveland, $57,665.

O., Toledo—City received bids grading, draining, curbing and paving with (1) rein.-con., (2) 3-in. vitr. brick, (3) 2-in. asphaltic concrete, (4) Mexican sheet asphalt, (5) 2-in. asphaltic block, (a) 1176 ft. Fremont St., 24 ft. wide, (b) 1259 ft., Booth Ave., 24 ft. wide, (c) 1259 ft. Bricker Ave., 24 ft. wide, (d) $1248 ft. Martha St., 24 ft. wide, (e) 4190 ft. Hudson St., 24 ft. wide, (f) 2581 ft. Oakdale Ave., 26 ft. wide, from M. F. O'Sullivan, 145 Oak St., (a1) $13,445, (a2) $16,689, (f2) $41,703; H. P. Streicher Co., 319 Terminal Bldg., (a3) $16,854, (b4) $18,268, (e3) $59,596, (f4) $41,104; Russell & Jennison, 2463 Bway., (b1) $15,003, (e1) $47,852, (e2) $61,925, (f1) $32,718; P. H. Watters, 531 Lincoln St., (b2) $18,650, (c1) $13,442, (c2) $16,996; Asphalt Block Paving Co., 839 Ohio Bldg., (c5) $18,841, (d5) $20,620; Peters Bros., 237 Marion St., (d1) $16,132, (d2) $19,359. Noted June 5.

Streets and Roads (Continued)

★Michigan—State Highway Dept., Lansing, let contracts, to W. J. Schneider, Ann Arbor, improving 3.752 mi. Assessment Dist. Rd. No. 31, Wright Twp., Hillsdale Co., Class B, 16 ft. gravel, cost, $53,658; to J. W. Ederer & Co., Saginaw, 3.985 mi Assessment Dist. Rd. No. 102, McKinley Twp., Huron Co., Class E, 12 ft. gravel, $46,767, 3.462 mi. Assessment Dist. Rd. No. 183, Huron Co., Class E, 12 ft. gravel, $39,287, to Shultz & Liken, Sebewaing, 4.493 mi. Assessment Dist. Rd. No. 111, McKinley Twp., Huron Co., Class E, 12 ft. gravel, $52,608, 1.993 mi. Assessment Dist. Rd. No. 208, Huron Co., Class E., 12 ft. gravel, $24,031; to Wolverine Constr. Co., Kalamazoo, 7.095 mi. Federal Aid Project No. 30, concrete, 16 ft. wide. $172,751. Noted June 5.

★Michigan—State Highway Comn. Lansing, let contract grading and building drainage structures on 6 mi. road in Oakland and Livingston Counties, to N. Werkley, Lansing, $16,089. Work involves 13,652 cu.yd. excav.

Mich., Detroit—City received bids paving with 1 course concrete Alleys Nos. (a) 1015, (b) 1016, (c) 1017, (d) 1018, (e) 1019, (f) 1020, (g) 1021, (h) 1022, (i) 1023, (j) 1024, from T. E. Currie, McGraw Bldg., (a) $5816, (d) $3456; Otis Cement Constr. Co., 806 Hammond Bldg., (a) $5856, (b) $5144, (c) $4702, (d) $3511, (e) $3641, (f) $3141, (g) $2847, (h) $3019, (i) $2790, (j) $982; R. J. Powelson Co., 1577 Iroquois Ave., (a) $6160, (b) $5395, (c) $4853, (d) $3667, (e) $3759, (f) $3240, (g) $2865, (h) $3098, (i) $2863, (j) $965; E. Meredith & Co., 145 Harper Ave., (b) $5230, (c) $4784; Talbot Co., 400 Penobscot Bldg., (e) $3724, (f) $3205, (h) $2985, (i) $2757, (j) $975; Lennane & McIlvenna, 1205 Book Bldg., (g) $2795. Noted June 19.

★Mich., Detroit—Dept. Parks & Blvds., 822 Farwell Bldg., let contract paving and improving approaches to Michigan Central Depot, in Roosevelt Park as follows: 9103 sq.yd. asphaltic wearing surface, to Dept. Pub. Wks., City Hall, $13,155; concrete foundation, curb, headers, etc., to J. Porath, 34 McGraw Bldg., $32,516. Noted June 19.

★Illinois—State Highway Comn., Springfield let contracts improving 4200 ft. Sect. S, Route 4, Fulton Co., to Sutton & Rhodes, Canton, $15,800; 2121 ft. Sect. K, Route 15 and 2336 ft. Sect. L, Route 17, McHenry Co., to Cole & Fauber, Shermerville, $8179 and $7624 respectively; 7254 ft. Sect. F, Routes 10 and 11, Ogle Co., to Gund Graham Co., Freeport, $19,983; 1550 ft. Sect. D, Route 2, Edwards Co., to Schernekar & Sons, West Salem, $3427; 5200 ft. Sect. I, Route 12, Macoupin Co., to Miller & Husband, Springfield, $2199; 12,750 ft. Sect. G, Route 1 and 12,000 ft. Sect. J, Route 11, Woodford Co., to White & Braley, Litchfield, $5903 and $7078 respectively Noted June 5.

★Illinois—State Highway Comn., Springfield, let contract improving Sects. B, C and D, Chicago-Joliet Highway, to R. F. Conway Co., 133 West Washington St., Chicago, cost $364,000; Sect. 3, Dixie Highway, Iroquois Co., to Warner Constr. Co., 189 West Madison St., Chicago, $151,435; Sects. I, J, K and G-15d, Natl. Highway, Effingham Co., to C. J. Moritz Inc., West Allis, Wis., $280,000. Noted June 5.

Illinois—State Highway Comn., Springfield received bids improving 22,459 ft. Sect. L, Natl. Highway, Effingham Co., from A. M. Hoolan, 607 Wainwright Bldg., St. Louis, Mo., cost $132,408; 17,994 ft. Sect. M, and 27,887 ft. Sect. N. from J. Black Masonry & Constr. Co., Telephone Bldg., Chicago, $93,819 and $134,092 respectively, W. C. Meneely, Frankfort, Ind., 135,915 and $176,874 respectively. W. F. Smith & Co., Renssalaer, Ind., $117,447 and $150,588 respectively, combined bid, $250,534. Noted June 5.

Illinois—State Highway Comn., Springfield, received bids June 18, paving 4678 ft. Peoria-Springfield Highway, 16 ft. wide, Sect. M, Mason Co., from Bates & Rogers, 37 West Van Buren St., Chicago, $19,926, H. K. Rhodes, Lincoln, $20,239. Noted June 5.

★Ill., Edwardsville—Comrs. Madison Co. let contract paving 5 mi. Alton-St. Louis Rd., monolithic brick, to M. Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. About $169,307. Noted June 12.

★Wis., Ladysmith—Rusk Co. let contract grading Ladysmith Rd., Federal Aid Project No. 91, to J. F. Mitchell, Ladysmith, 25,385 cu.yd. grading at $.50 per cu.yd., 322 cu.yd. concrete culverts, $18.50, 218 cu. yd. concrete bridge, $18.50, and 243 cu.yd. borrow excav., $.50. Total cost $22,813.

Wis., Sheboygan—City received bids grading and paving (a) 2.5 mi. North 10th St., from Superior to Jule Aves., 20 ft. wide, involving 10,715 sq.yd. concrete and 5210 lin. ft. concrete curb and gutter, (b) 1.8 mi. East Water St. to Center Ave. and North 6th to East Water Sts., 20 ft. wide, involving 1500 sq.yd. concrete, etc., from J. Braun Co., Pennsylvania Ave., (a) $28,292, (b) $11,991; Pestien & Naumann, 15th St., (a) $27,973, (b) $12,590. Noted June 12.

★Wis., Waukesha—Waukesha Co. let contract grading and surfacing Mokwonago Rd., to Milwaukee Gen. Constr. Co., 857 8th Ave., Milwaukee, 2842 cu.yd. grading, $2,358, 71 cu.yd. concrete culverts, $18, 260 lin.ft. guard rail at $.40, and 9956 sq.yd. concrete surfacing, $2.28. Total cost, $26,457.

★Minn., Elk River—Comrs. Sherburne Co. let contract paving and grading 6½ mi. Federal Aid Project No. 69, State Rd. No. 1, to Widell Co., Mankato, $168,045. Noted May 22.

★Minn., Hastings—Comrs. Dakota Co. let contract paving 6 mi. Federal Aid Project No. 23, State Rd. No. 1, 18 ft. wide, bitulithic, to Warren Bros., 142 Berkeley St., Boston, Mass. About $178,000. Noted May 22.

★Minn., Little Falls—Comrs. Morrison Co. rejected bid received June 18, building 11.9 mi. Federal Aid Project No. 24, State Rd. No. 3, 24 ft. wide. Work will be done by day labor. A. J. Fenn, Little Falls, engr. Noted June 19.

★Minn., Montevideo—Comrs. Chippewa Co. let contract grading and graveling 15 mi. Federal Aid Project No. 49, State Rds. Nos. 1 and 4, 24 ft. wide, to Studor & Manion, Excelsior, $57,000. Noted May 29.

★Kan., Harper—City let contract for 52,653 sq.yd. vitr. brick paving and 14,185 lin.ft. combination curbing and guttering, to A. L. Cook, Ottawa, $103,038. Noted June 5.

★Kan., Strong City—City let contract for 21,297 sq.yd. bituminous paving and 8566 lin.ft. curbing and guttering, to Moley & Kelley Constr. Co., Kansas City, Mo. About $42,700. Noted May 29.

★Neb., Lincoln—Comrs. Lancaster Co. let contract grading South 14th St. from here to Beatrice, to Cook-O'Brien Constr. Co., 305 Ry. Exch. Bldg., Kansas City, Mo., $0.345 per yd. Noted May 15.

N. D., Grand Forks—City soon lets contract paving, curbing, grading, and draining 47,358 sq.yd. in Paving Dists. No. 10 and 16, Portland cement concrete, 20-30 ft. wide. About $155,400. C. S. Giles, city engr.

★Mont., Billings—City let contract paving Custer and Terry Aves., to Warren Constr. Co., Journal Bldg., Portland, Ore. About $105,000. Noted Mar. 27.

★Mo., Excelsior Springs—City let contracts, to P. P. Young, R. F. D. No. 6, St. Joseph, Mo., paving 1200 ft. Kansas City Ave., 30 ft. wide, involving 4710 sq.yd. vitr. brick on old base, asphalt filler, cost $12,075; resurfacing 680 ft. Elms Blvd., 36 ft. wide, 3407 sq.yd. bituminous macadam, penetration method, $4259. Noted June 5.

★New Mexico—State Highway Comn., Santa Fe, let contract grading, surfacing and building culvert and bridge on 9.7 mi. road from Raton to Colorado state line, Federal aid project No. 1-A, Colfax Co., to Odell Bros., Colmor. About $130,000.

★Wash., Olympia—City let contracts to Allred, James, Hendrickson, Allers & Son, Centralia, grading and paving Grant, Harrison and Rodgers Sts., 30 ft. wide, involving 11,083 sq.yd. asphalt on concrete base, 18,062 sq.yd. 1 course concrete, 8441 lin. ft. concrete curbing, 2716 lin. ft. concrete sidewalks and 16,644 cu.yd. excav., cost, $118,726; ¾ mi. Puget St., from 3rd to San Francisco Sts., 3 ft. wide, involving 8795 sq.yd. concrete, 1147 lin. ft. concrete curbing, 4108 lin. ft. concrete sidewalks, 5000 cu.yd. earth excav. and 4300 ft. 8 in. sewers, $38,243.

★Wash., Seattle—Comrs. King Co. let contract building 1.87 mi. J. B. McDougall Rd., 16 ft. wide, involving 18,000 sq.yd. concrete and 3000 cu.yd. earth excav., to Seaboard Constr. Co., Seattle, $47,904. Noted June 12.

★Oregon—State Highway Comn., Portland, let contract grading 1.9 mi. Cedar Point-Coquille Rd., Coos Co., and 6.94 mi. Hubbard Creek-Brush Creek Rd., Curry Co., to Moon & Co., Marshfield, concrete pipe, $10,640 and $157,590, respectively; 10.9 mi. Green Springs-Mt. Summit Sect. Pacific Highway, Jackson Co., to A. Giebisch, Rothchild Bldg., Portland, Class "[illegible]" concrete and iron pipe, $127,398; 3.8 mi. Aurora-Canby Rd., Clackamas Co., to W. B. Tull, Portland, iron pipe, $34,401; 21.4 mi. Echo-Pendleton Rd., Umatilla Co., to Johnson Constr. Co., iron pipe, $192,014; 26.8 mi. Cabbage Hill-Kamela Rd., Umatilla Co., to Dalrymple Co., Pendleton, concrete pipe, $117,875; 8.15 mi. Green Springs-Mt. Jenny Creek Rd., Jackson Co., to Jackson Co. Court, Jacksonville, $63,440; paving 2.43 mi. road from Bertha to Washington Co. line, Multnomah Co., to Warren Constr. Co., Journal Bldg., Portland, bitulithic E, $67,291; grading and paving 9 mi. road from Monroe north, Benton Co., to Pacific Bridge Co., foot of Salmon St., Portland, broken stone concrete pipe, $214,369; grading and graveling, 4.65 mi. Sag Sect. Baker-Cornucopia Highway, Baker Co., to Morrison & Knutson, Boise, Idaho, iron pipe, $42,924; grading and macadamizing, 4.5 mi. Roseburg-Wilbur Rd., Douglas Co., to H. J. Hildeburn, Roseburg, concrete pipe, $21,721. Noted June 12.

Oregon—State Highway Comn., Portland, received only bid June 10, grading and paving 2 mi. Grande Ronde-Butler Store Rd., Yamhill Co., macadam, from W. N. Trent, McMinnville, $16,170; 3.25 mi. Leona-Drain Rd., Douglas Co., (a) concrete pipe broken stone, (b) iron pipe broken stone, (c) concrete pipe screened gravel, (d) concrete pipe run of bank gravel, from A. Giebisch, Rothchild Bldg., (a) $73,406, (b) $73,386; A. Anderson, Portland, (c) $62,210, (a) $59,490, (d) $54,390. Noted June 12.

Ore., Portland—City Council received bids paving (a) Roosevelt St., (b) Bway., portions of East 9th and Webster Sts., from Cochran Bros., (a) concrete No. 1, $2.05 per yd., total cost, $5175; Warren Constr. Co., Journal Bldg., (a) asphaltic concrete No. 1, $1.94, $5336, (b) asphaltic concrete No. 1, $1.98, $4458. Noted June 12.

★Cal., Ferndale—City let contract paving 4500 ft. Main St., concrete, to Engelhart Co., Eureka, $22,500.

★Cal., Los Angeles—Wilshire Blvd., Hotel Co., Maryland Hotel, Pasadena, let contract grading 10-acre site at Wilshire Blvd. and Catalina St., to J. A. Hill, 232 South Figueroa St., Los Angeles, $13,180.

★Cal., Merced—Comrs. Merced Co. will pave 5 sections of county highways, consisting of 42.84 mi., 16 ft. wide. About $540,000. Work will be done by day labor. Former bids rejected. A. E. Cowell, co. engr.

★Cal., Oakland—Comrs. Alameda Co. let contract improving East 14th St. and 55th Ave., to Ruegg Constr. Co., Pacific Bldg., San Francisco, grading $0.03 per sq.ft., vitr. sewer, 8 in. $1.05 per sq.ft., 5 in., $0.75 per sq.ft., 4 in. $0.60 per sq.ft., manholes, $75 each, lampholes, $25 each, wire branches, $1.50 each, concrete curbing, $0.65 per sq.ft., guttering, $0.25 per sq.ft., sidewalk, $0.17 per sq.ft., asphalt pavement, $0.14 per sq.ft. Total cost about $110,000.

★Cal., San Andreas—City let contract grading and graveling Melones Grade Highway, to A. J. Reeder, 110 Jessie St., San Francisco, $17,204.

★Que., St. Constant—Municipal Council let contract building bituminous road, to Canadian Highways Co., 13 Place Guay, Montreal. About $35,000.

★Ont., Ottawa—City let contracts paving Elgin St. from Slater to Argyle Aves. with asphalt and wood block, to Ottawa Constr. Co., Elgin St., $153,055; Carling Ave., asphalt, to O'Leary's, Ltd., Rideau St., $14,165. Noted Jan. 30.

★Ont., Toronto—Bd. Control let contract paving with asphalt on concrete base, concrete curbs and gutters on Arundale and Danforth Aves., to Godson Contg. Co., Manning Chambers, $16,153. Noted May 15.

★Ont., Toronto—City Council will pave, curb and gutter Alvin, Oakville and Maclean Aves., Elm, Pendruth and Sackville Sts., and Weston and Waverly Rds., involving 40,000 sq.yd. asphaltic pavement on concrete base, concrete curb and gutter. About $147,300. Work will be done by day labor.

★Ont., Walkerton—Town let contract building 7.7 mi. bituminous macadam road, 18 ft. wide, to W. Hunter, Walkerton. About $60,000.

★Ont., Windsor—City let contract building asphaltic concrete roads, concrete curbs and gutters, to Merlo, Merlo & Ray, 4 Victoria Rd., Walkerville. About $87,000.

Streets and Roads (Continued)

★**Ont., Woodstock**—City let contract curbing, draining and paving with concrete Wilson. Cedar, Finkle, Ingersoll Aves., also building catch basins and 1 culvert, to J. Carroll and R. Sheeky, Peterboro, $44,010. Noted May 29.

Railways

PROPOSED WORK

Maryland—Manufacturers on eastern shore of Maryland, headed by H. H. Messenger, Federalsburg, considering plans for building 75 mi. double track electric railway from Salisbury to Tolchester Beach, including 3 bridges.

Michigan—Michigan Northern Ry., Alma, having surveys made for line from Lansing to Bay City and Lansing to Kalamazoo, to use dual sytem of gas and electricity, 1st project to comprise about 130 mi. About $3,000,000. H. H. Esselstyn, ch. engr.

Texas—San Benito & Rio Grande Valley R.R., San Benito, plans to extend line up Rio Grande Valley to Roma, thence northwest to connection with Texas-Mexican R. R. at Aguilares. G. H. Winsor, genl. mgr.

California—Bd. Pub. Utilities ordered Los Angeles Ry., Pacific Electric Bldg., Los Angeles, to build double track line on Bway. from 10th to Pico Sts. About $50,000. T. Bultin, ch. engr.

California — See "Miscellaneous" under Newport Beach.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ohio**—Cleveland Ry., Leader News Bldg., Cleveland, will build 7500 ft. double track on Union Ave. from East 116th St. to Cortlett Ave., estimated cost, $175,000; 3300 ft. double track on Kinsman Rd. from East 140th St. to 152nd Sts., $95,000; 5300 ft. single track on Broadview Rd. from West 25th St. to Schaaf Rd., $60,000; 8000 ft. double track on West 73rd St. from Denison Ave. to West Park Cemetery, $60,000. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

Mich., Detroit—Excavation—See "Streets and Roads."

Cal., Newport Beach — Dredging — See "Miscellaneous."

BIDS DESIRED

Minn., Grand Rapids—See "Streets and Roads."

Minn. Mankato—Ditch—Comrs. Blue Earth Co. having preliminary survey made for building Judicial Ditch No. 4, comprising 150,000 acres. About $2,000,000. C. L. Kennedy, co. aud.

Kan., Troy—Drainage—Burr Oak Bottoms D. D. having plans prepared for system to drain about 2000 acres. W. B. Hazen, Commercial Bldg., St. Joseph, Mo., engr.

Mo., Butler—Excavation—D. D. No. 1, Bates Co., plans to build 25 mi. ditches. About $750,000. J. Flamming, Butler, engr.

Tex., Beaumont—Drainage—Jefferson Co. is having preliminary surveys made by T. W. Rollins, civil engr., for drainage and dredging system for northern section of county. About $1,000,000.

Tex., Houston—Canal—Harris Co., Navigation Dist. voted to issue $1,500,000 bonds to widen Houston Ship Canal and deepen it to 30 ft., in conjunction with War Department. J. C. McVea, city engr.

Tex., Orange—See "Streets and Roads."

Ariz., Gila Bend—Reclamation—Town having surveys made reclaiming 70,000 acres of land by system of canals, in Gila River Recl. Project. Cost between $3,000,000 and $4,000,000. J. B. Girand, Fleming Bldg., Phoenix, engr.

Wash., Kelso—Drainage—Diking Impvt. Dist. No. 1 plans to drain Clarke Creek on outskirts of district and extend dike. About $25,000. G. J. Poysky, Kelso State Bank Bldg., engr.

Cal., Long Beach—Channel—C. T. Leeds, U. S. engr., Central Bldg., Los Angeles, soon lets contract digging channel 500 ft. wide and about 6 mi. long, also building levees to carry Los Angeles River from point near Dominguez Sta., through west portion of Long Beach into ocean. This project is part of Los Angeles Co. flood control project. U. S. Government will do this and other work in connection therewith; about $1,000,000 available for work.

DAM—GILBOA, N. Y.

Bids were received by Board of Water Supply, June 19, for constructing Gilboa Dam. Contr. No. 203, from (A) Hugh Nawn Contg. Co., 82 Savin St., Roxbury, Mass. (awarded contract); (B) P. McGovern, 50 East 42nd St., New York City; (C) Booth & Flinn. Ltd., 17 Battery Pl., New York City; (D) Smith, Hauser & MacIsaac, Inc., 18 East 41st St., New York City, $6,907,275; (E) Hardaway Contg. Co., Columbus, Ga., $6,983,035; (F) Winston & Co. 29 Bway., New York City, $7,563,760. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
Stream control, Schoharie Creek (lump sum)	$125,000.00	$204,727.00	$100,000.00
Stream control, Steen Kill (lump sum)	20,000.00	84,500.00	17,500.00
Erecting, maintaining and removing highway bridge (lump sum)	15,000.00	70,000.00	15,000.00
275,000 cu.yd. earth excavation for dam and spillway channel	1.00	1.35	2.00
21,000 cu.yd. earth excavation for core-wall and other trenches	3.00	3.00	3.50
100,000 cu.yd. earth excavation for highways and miscellaneous purposes	1.80	2.20	2.25
60,000 cu.yd. rock excavation for dam and spillway channel	3.50	4.50	4.00
2,500 cu.yd. rock excavation for highways and miscellaneous purposes	3.50	3.50	3.40
30,000 cu.yd. rock excavation from cut-off trench and when blasting is not permitted	7.00	11.00	7.00
500,000 cu.yd. refilling and embanking in 4-in. layers	1.00	1.15	2.25
70,000 cu.yd. refilling and embanking deposited through water	.70	.80	2.50
12,000 cu.yd. refilling and embanking with clean rock fragments	1.00	2.80	2.50
20,000 cu.yd. refilling and embanking by sluicing	.80	.60	2.25
15,000 cu.yd. refilling and embanking in bulk	.40	.50	2.00
480,000 bbl. Portland cement	2.95	2.70	2.90
370,000 cu.yd. cyclopean masonry	6.65	5.90	4.40
15,000 cu.yd. concrete masonry	9.50	10.00	7.00
25 cu.yd. reinforced concrete	32.00	18.00	15.00
20,000 cu.yd. rubble stone facing	16.00	11.00	10.00
6,000 cu.yd. edgestones for facing	27.00	16.00	20.00
50,000 sq.ft. face dressing of masonry	.45	.17	.50
10,000 lin.ft. chisel drafts	.50	.05	.40
300 sq.ft. flagging	1.00	.30	.25
500 cu.yd. rubble masonry in mortar	6.00	10.00	5.40
25,000 cu.yd. rubble paving in mortar or grouted	7.00	7.00	5.00
2,000 cu.yd. dry rubble masonry	5.00	7.00	4.50
16,000 cu.yd. slope paving	6.00	4.60	5.50
2,000 cu.yd. gutter paving	6.00	10.00	7.00
7,000 cu.yd. crushed stone and gravel	2.00	2.30	2.50
1,000 cu.yd. grout	15.00	17.00	5.00
3,500 lin.ft. drilling core borings	5.00	4.60	6.00
5,000 lin.ft. drilling small holes in rock or masonry	.75	.20	.40
30 ton cast-iron pipe and special pipe castings	125.00	115.00	140.00
3,000 lb. reinforcing steel	.07	.08	.06
140,000 lb. iron and steel	.10	.12	.09
6,000 lb. miscellaneous bronze, brass and copper	.80	1.00	1.00
35,000 lb. furnishing and placing small steel pipes	.15	.12	.15
100,000 lb. caring for and setting metal-work furnished by the city	.03	.02	.05
10,000 lb. galvanizing	.05	.06	.08
50 sq.yd. bituminous waterproofing	1.50	1.00	2.75
5,000 lin.ft. tile pipes 6 in. and less in diameter	.45	.45	.70
1,000 lin.ft. tile pipes 8 to 12 in. in diameter	.90	1.00	1.50
500 lin.ft. tile pipes larger than 12 in. and not exceeding 18 in. in diameter	1.25	2.00	2.90
11,000 lin.ft. bituminous macadam highway	3.55	7.00	3.00
15,000 lin.ft. wooden fences and guard-rails	.70	1.00	.80
1,500 lin.ft. stone guard walls	3.00	4.50	3.00
500,000 ft. b.m. timber and lumber	100.00	85.00	130.00
100 medical and surgical practitioners (prac. month)	450.00	400.00	500.00
78 sanitary services (month)	800.00	700.00	850.00
Cleaning up (lump sum)	7,500.50	10,000.00	25,000.00
Extended totals	$6,819,910	$6,882,108	$6,899,568

BIDS DESIRED

Ia., Marshalltown—Drainage—Until July 15, by Bd. Supervs. Marshall Co., building Iowa River Drainage Project in Bangor, Marietta, Linn, Liscomb, Iowa and Taylor Twps. Plans include straightening, widening, deepening and changing of channel of Iowa River involving 1,400,000 yds. excav. W. H. Jones, chn; advertised in this issue.

Ia., Wapello—See "Waterworks."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Jersey City—Dredging—Pennsylvania R. R., Pennsylvania Sta., New York City, let contract dredging between Piers F and G, to Morris & Cummings Dredging Co., 17 State St., New York City, dredging and legally disposing of material, $0.477 per cu.yd., labor 10%, material 10%, and subcontract 2½%, dredging with 8-yd. bucket including fire, $1000.

Mich., Lansing—See "Streets and Roads."

Industrial Works

PROPOSED WORK

Me., Sanford—Sanford Mills, c/o Lockwood-Greene Co., archts. and engrs., 101 Park Ave., New York City, having plans prepared for two 1 story rein.-con. and steel dye houses, rein.-con. flooring, concrete foundation. About $200,000.

Mass., Boston—Noyes Buick Co., 17 Lawton St., having plans repared by A. H. Bowditch, 44 Broomfield St., for superstructure of 5 story, 200 x 375 ft. rein.-con. storage and sales building, rein.-con. flooring, concrete foundation, on Commonwealth St. Contract for foundation awarded, to C. Gow Co., 166 Devonshire St.

Mass., Fitchburg—Crocker, Burbank & Co., Inc., 545 Westminster St., soon receives bids building 2 story, 60 x 200 ft. brick and steel addition to factory, concrete foundation, on Westminster St. About $100,000.

Mass., Holyoke—G. Haarmann & Co., Inc., Commerce St., plans to build new plant. About $60,000. Architect not selected.

Mass., New Bedford—Natl. Sponge Silk Co., c/o Lockwood-Greene Co., archts. and engrs., 101 Park Ave., New York City, having plans prepared building 4 story, 120 x 400 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, here. About $750,000.

Mass., Worcester — Walden-Worcester, Inc., 72 Commercial St., soon receives bids building 4 story, 56 x 400 ft. brick factory, concrete foundation, on Shrewsbury St. About $200,000.

Conn., Ansonia—H. C. Cook Co., Beaver St., having plans prepared by Fletcher-Thompson Inc., engrs., 1089 Broad St., Bridgeport, for 1 story, 60 x 250 ft. brick and concrete addition to factory, rein.-con. flooring, concrete foundation. About $40,000.

Conn., Bridgeport—J. W. Skinner, archt., 1188 Main St., soon receives bids building 2 story, 45 x 85 ft. factory and 2 story, 38 x 70 ft. office and storage building, brick, concrete foundation, on Water St., for J. D. Johnson Co., 54 Cliff St., New York City.

Conn., Bristol—A. R. Ellis, archt., 36 Pearl St., Hartford, soon receives bids building 3 story, 32 x 190 ft., brick and mill construction factory, concrete foundation. About $50,000. Owner's name withheld.

Industrial Works (Continued)

Conn., Hartford—Chamber of Commerce, 252 Asylum St., is back of project to build community industrial building to house smaller industries who cannot secure funds to build themselves. About $150,000. S. Ferguson, chn.

Conn., Jewett City—Fletcher-Thompson Inc., engrs., 1089 Broad St., Bridgeport, soon receive bids building 1 story, 60 x 100 ft. bleach house, 1 story, 24 x 24 ft. mill and 1 story, 20 x 24 ft. office, brick and mill construction, concrete flooring, concrete foundation, for Jewett City Textile Novelty Co. About $30,000.

Conn., New Haven—F. E. Fowler Co., 238 State St., having plans prepared by C. F. Townsend, archt., 185 Church St., altering and building 2 story, brick and steel addition to present plant, rein.-con. flooring, concrete foundation, on State and Crown Sts. About $60,000.

N. Y., Albany—G. H. Thacher, Thacher and Learned Sts., soon receives bids for machine shop and foundry, on Learned St. About $50,000.

N. Y., Attica—J. A. Berk, Vermillion, O., purchased Attica Mills, on Main St., here, and plans to alter and enlarge plant, mill construction. About $35,000.

N. Y., Brooklyn—Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., preparing plans for 2 story, 100 x 125 ft. brick, steel and mill construction factory, rein.-con. flooring, brick foundation, on North Portland Ave. About $75,000. Owner's name withheld.

N. Y., Buffalo—Rogers-Brown Iron Co., Erie Co. Bank Bldg., soon lets contract building 1 and 2 story, 66 x 262 ft., rein.-con. machine shop, rein.-con. flooring, concrete foundation, on Hamburg Turnpike. About $75,000.

N. Y., Buffalo—Quayle Garage Co., Main and Rodney Sts., soon receives bids for brick garage. About $40,000.

N. Y., Buffalo—G. M. Wolfe, archt., 131 Norwalk Ave., soon receives bids building 7 story, 75 x 150 ft. rein.-con. warehouse, rein.-con. flooring, concrete foundation, on Main St., for Cold Springs Storage Co., Main St. About $300,000.

N. Y., Carthage—C. J. Reeder, H. I. Starkweather, C. H. Lovejoy, F. P. Wilder, and others, all of Carthage, plans to incorporate and build brick garage. About $40,000. Address H. I. Starkweather, 16 Front St.

N. Y., Jamestown—Jamestown Panel Co., 34 Steele St., soon receives bids building 4 story, 40 x 129 ft. mill construction factory, on Lakeview Ave. About $50,000.

N. Y., Jamestown—Union Furniture Co., 234 Crescent St., soon receives bids building 5 story, 59 x 300 ft., mill construction factory. About $175,000. C. E. Nord, c/o owner, archt.

N. Y., Ogdensburg—See "Miscellaneous."

N. J., Jersey City—Eastern States Refrigerating Co., 147 16th St., plans to build 7-story, concrete and brick plant, on Provost St. Cost to exceed $150,000.

N. J., Jersey City—Novelty Candy Co., Claremont Ave., plans to build 6 story factory. Cost to exceed $100,000.

Pa., Bangor—Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, soon let contract building 2½ story, 50 x 100 ft., brick and steel factory, rein.-con. flooring, concrete foundation, here. About $80,000. Owner's name withheld. Noted June 12.

Pa., Chester—Huber Baking Co., 9th and Union Sts., having plans prepared by Austin Co., engrs., Bulletin Bldg., Phila., for 1 story, 50 x 100 ft. and 2 story, 60 x 100 ft. bakery. About $100,000.

Pa., Phila.—T. T. Uezell, archt., 117 Walnut St., soon lets contract building 2 story, 13 x 72 ft. brick storage plant on Venango St. near Warnock St., for McCray & Hunter, 3525 Germantown Ave.

Pa., Phila.—Windsor Mfg. Co., 4060 Orchard St., having plans prepared by M. W. Easby, archt., 1420 Chestnut St., building 63 x 250 ft. factory of brick and slow-burning construction, on Butler and Jasper St.

Pa., Pittsburgh—Campbell-Neidringhaus Tire Serv. Co., Baum Blvd. and St. Clair St., plans to build 2 story, 75 x 100 ft., rein.-con. and steel garage and sales building, rein.-con. flooring, concrete foundation, on Baum Blvd. About $75,000. Architect not selected.

Md., Baltimore—Canton Air Brake Co., 563 Calvert Bldg., having plans prepared by R. Schoenwetter, engr., c/o company, and C. A. Zarobsky, engr., 563 Calvert Bldg., for first unit of plant, consisting of 2 story, 60 x 200 ft., rein.-con. machine shop, 24,000 sq.ft. floor space and concrete foundation, on Wilkens Ave. near Pennsylvania R. R. crossing. About $80,000. Noted Mar. 6.

Md., Baltimore—H. Corry and M. Goldstein, 145 West Hamburg St., plan to build 1 story, 46 x 155 ft., concrete and brick garage, cement concrete flooring, brick and concrete foundation, on Race and Cross Sts. About $50,000. J. C. Spedden, 2715 Harlem Ave., archt.

W. Va., Huntington—E. E. and H. D. Brinker plan to build 3 story (ultimately 7 story), brick and rein.-con. storage plant, rein.-con. flooring, concrete foundation, on 7th Ave. About $80,000.

N. C., Gastonia—C. L. Craig plans to build 2 story, 50 x 200 ft. brick garage, concrete flooring, on Ainline Ave. C. C. Wilson, 804 Palmetto Bldg., Columbia, S. C., archt.

La., St. Landry—W. E. Caldwell Co., Brook and D Sts., Louisville, Ky., plans to build 30,000 to 35.000 cut band saw mill here.

Ky., Louisville—Amer. Storage Warehouse Co., Louisville Trust Bldg., plans to build warehouse. About $400,000. B. B. Davie, Starks Bldg., archt.

O., Cleveland — Euclid Chester Co., Guardian Bldg., plans to build 2 story, 100 x 112 ft., rein.-con., steel and brick warehouse, at 2900 Chester Ave. About $100,000. Architect not selected.

O., Cleveland—Foster Bolt & Nut Mfg. Co., 3556 East 72nd St., preparing plans for 2 story, 77 x 125 ft., steel and brick warehouse. About $40,000.

O., Cleveland—Grabler Mfg. Co., 6565 Bway Ave., plans to build 4 story, 89 x 110 ft. oncrete, steel and brick addition to machine shop. About $80,000. Architect not selected.

O., Cleveland—Wheeler Radiator Mfg. Co., 1637 Collamer Rd., plans to build 4 story, 100 x 250 ft., concrete, steel and brick addition to factory. About $250,000. Architect not selected.

O., Columbus—D. L. Auld Co., 195 East Long St., plans to build 2-story, 45 x 390 ft. brick factory with 90 ft. wing, on 5th St. and 5th ave. About $60,000. C. W. Bellows, 69 Ruggery Bldg., archt.

O., Columbus—G. Bobbs & Sons Co., Main and Pearl Sts., plans to construct 3 or 4 story, 93 x 187 ft., wholesale grocery building. About $160,000.

O., Columbus—Marietta Paint & Color Co., 62 East Chestnut St., plans to build 2 story, 38 x 187½ ft., concrete and brick warehouse, on East Chestnut St. About $67,000. Architect not selected.

O., Dayton—Master Tire & Rubber Co., 706 Schwind Bldg., plans to build plant. cost, including equipment, $100,000.

O., Dayton—Mitchell Sales Co. plans to build 2 story, 80 x 176 ft., rein.-con. garage and salesroom, rein.-con. flooring, concrete foundation, on Main and Riverdale Sts. About $35,000. Architect not selected.

O., Springfield—Ohio Steel Fdry. Co., Lagonda Ave. and Gothic St., plans to construct 1 story, 60 x 70 ft., rein.-con. and steel, welding building and garage, and 1 story, 60 x 80 ft., rein.-con. laboratory and research building. About $25,000.

O., Springfield—Robbins & Myers Co., Lagonda Ave. and Farlow St., plans to build 1 story, 70 x 180 ft., rein.-con. and steel foundry, rein.-con. flooring, concrete foundation. About $120,000. Austin Eng. Co., 14320 Euclid Ave., Cleveland, engrs. and archts.

O., Springfield—Springfield Spring Co., East Pleasant St., plans to build 1-story, 30 x 273 ft. warehouse and 1-story, 30 x 76 ft. machine shop, steel and brick, brick foundation. About $70,000. Concrete Steel Constr. Co., 515 Mitchell Bldg., archts. and engrs.

O., Springfield—Superior Gas Engine Co., c/o P. S. Shouvlin, pres., Sheridan Ave., plans to build 2 story, 60 x 150 ft., rein.-con. machine shop, concrete flooring, 1 story, 110 x 280 ft., steel foundry, rein.-con. flooring and foundation, and 1 story, 95 x 160 ft., rein.-con. storage house, on Sheridan Ave. About $150,000.

Ind., Fountaintown—Hungate Wholesale Co. plans to build canning factory. About $90,000. W. J. Hungate, pres.

Ind., Indianapolis—Van Briggle Motor Driver Co., 429 North Capitol Ave., plans to build 3 story, 108 x 208 ft. rein.-con. factory. About $75,000. C. F. Bacon, 617 Merchants Bank Bldg., archt.

Mich., Detroit—A. Harvey Sons Mfg. Co., Woodbridge St., soon lets contract building, 6 story, 44 x 67 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation, on Woodbridge and Front Sts. Smith, Hinch & Grylls, 710 Washington Arcade archts.

Mich., Kalamazoo—Western Board & Paper Co. preparing plans for 3 story, 60 x 218 ft., concrete and steel stock house, concrete foundation.

Mich., Lansing—City election July 26, to vote on $350,000 bonds to build extensions to electric light plant.

Ill., Chicago—C. A. Eckstrom, archt., 5 North La Salle St., soon receives bids building 6 story, 220 x 400 ft. rein.-con. warehouse, rein.-con. flooring, concrete foundation, on North Pier, for Chicago Dock & Canal Co., c/o archt. About $500,000.

Wis., Carrollville (Otjen P. O.)—H. J. Esser, archt., Camp Bldg., Milwaukee, soon lets contract building 2 story, 67 x 219 ft. and 3 story, 50 x 50 ft. rein.-con. and brick fertilizing plant, rein.-con. flooring, concrete foundation, for U. S. Fertilizer Co., c/o U. S. Glue Co., Otjen. About $100,000.

Wis., Clintonville—Clintonville Car Co., c/o F. Spearbraker, soon lets contract building 1-story, 60 x 110 ft. rein.-con. and brick garage, brick foundation, on Main St. About $50,000. Foeller & Schober, 123 North Washington St., Green Bay, archts.

Wis., Milwaukee—Briggs & Stratton Co., 1047 Louis St., receives bids about July 1, building 5 story, 60 x 170 ft. factory, with 21 x 70 ft. wing, rein.-con. and brick, rein.-con. flooring, concrete foundaton, at 1047 Louis Ave. About $200,000. H. J. Esser, Camp Bldg., archt. Noted Jun. 12.

Wis., Milwaukee—Milwaukee Milk Producers' Assn., 425 East Water St., plans to build rein.-con. and brick, depot, concrete foundation. About $50,000. Architect not selected.

Wis., Sheboygan—Haack Motor Co., c/o C. Haack, plans to build 2 story, 45 x 120 ft. rein.-con. and brick garage, rein.-con. flooring, concrete foundation, on Indiana Ave. About $60,000. Architect not selected.

Wis., Sheboygan—Sheboygan Upholstering Co., c/o O. Mahnke, 1634 Georgia Ave., plans to build 3 story, 60 x 110 ft., brick, rein.-con. and steel factory, rein.-con. flooring, brick foundation, at Lyman's addition. About $30,000. C. Grasse, 1543 South 11th St., archt.

Minn., Minneapolis—United States Cereal Co., 316 Corn Exch., soon receives bids building 6 story, 60 x 160 ft., rein.-con. and brick flour mill, brick foundation, on California and 22nd Sts., N. E. About $500,000. C. W. Lunquist, 712 15th Ave., N. E., archt.

Minn., Wells—City receives bids in July building power plant. About $75,000, including equipment. G. L. Pillsbury Co., 801 Metropolitan Life Bldg., Minneapolis, engrs.

Kan., St. Johns—See "Water Works."

Kan., Sharon Springs — See "Water Works."

N. D., Mandan—Western Auto Co. soon lets contract building 1 story brick garage. About $40,000. Black & Griffin, Mandan, engrs. Noted June 5.

Wyo., Laramie—Midwest Oil & Refining Co. plans to build oil refinery here. 5000 bbl. capacity.

Mo., Caruthersville—See "Water Works."

Tex., Houston—Magnolia Coffee Co., Liberty and Bremmond Sts., plans to build 5 story, rein.-con. factory and warehouse. on Liberty and Maffitt Sts. About $75,000. Finger & Bailey, 601 Kress Bldg., archts.

Industrial Works (Continued)

Tex., Paris—Rodgers-Wade Co., 19th and Bonham Sts., plans to build mattress factory. About $30,000.

N. M., Albuquerque—Bd. Regents, University of New Mexico, soon lets contract building 1 story, 107 x 112 ft. machine shop.

Idaho, Nampa—Colorado Milling & Elevator Co., 1441 7th St., Denver, Colo., having tentative plans prepared for 400 bbl capacity flour mill and 65,000 bu. grain elevator, here, probably concrete. O. Knoche, local mgr.

Wash., Vancouver—Heusner Co. plans to build bakery, concrete and brick, containing 100 x 100 ft. floor space, with one 60 x 100 ft. wing on 5th St. and one 40 x 100 ft. wing on Columbia St. About $25,000.

Ore., Albany—D. E. Nebbergall Meat Co. plans to rebuild meat packing plant ½ mi. northeast from here, recently destroyed by fire. About $40,000. R. O. Bushong, secy.

Ore., Linnton—Associated Oil Co., Pittock Blk., Portland, having plans prepared for concrete garage with wood trusses; 32 x 180 ft. loading rack and shed, 14 x 60 ft. steel frame; 125 x 210 ft. rein.-con. warehouse, concrete retaining walls around storage tanks, 20 x 30 ft. concrete and steel building and bunkhouse and group of cottages, here. About $250,000. A. D. Parker, mgr. Noted May 15.

Ore., Portland—See "Buildings."

Cal., Avalon—City voted $88,000 bonds for combined electric light and waterworks plant, and $55,000 for gas plant. A. B. Waddingham, Tajo Bldg., Los Angeles, city engr. Noted June 5.

Cal., Newport Beach—See "Miscellaneous."

Cal., Redwood City—Pratt-Lowe Co., Santa Clara, purchased site and plans to build cannery. About $25,000.

N. S., Bear River—Clarke Bros., Ltd., having plans prepared for sulphate mill to have 30-ton daily capacity, cost $200,000; saw mill, 30,000 ft. daily capacity, $25,000; hardwood mills, $51,000; drydock, to include ship repair shops, $100,000.

N. S., Tiverton—Digby Fish Meal Co. receives bids in July building 3 story, 60 x 100 ft. steel and brick factory, concrete foundation, on Queen St. About $25,000.

Que., Chaleurs—Chaleur Bay Mills Co. plans to build sawmill on Chaleurs Bay. About $100,000.

Que., Montreal—P. L. Dupre, archt., 15 Blvd., St. Laurent, soon receives bids building two brick and steel factories, concrete foundation, for Dupre Iron Wks., Ltd. About $75,000.

Que., Montreal—Scott Canadian Magnesite Co., Ltd., Power Bldg., plans to construct industrial buildings on Shawinigan St. About $350,000.

Ont., Kitchener—Ames Holden McCready, 1221 Mt. Royal Ave. E., Montreal, receives bids about July 15, building rubber tire factory, on King St. here. About $1,000,000.

Ont., Listowel—Canadian Flax Mills, 96 King St. E., Toronto, plans to build 3 or 4 story, concrete mill. About $100,000. Address F. W. Lukes, supt. Architect not selected.

Ont., Ottawa—Beach Co., Spencer St., having plans prepared by J. A. Ewart, archt., Booth Bldg., building 3 story, brick factory. About $75,000.

Ont., Scarborough—Gendron Mfg. Co., 137 Duchess St., Toronto, purchased 10 acre site here and plans to build plant to consist of ten 1 story, buildings, 80 ft. wide, steel and brick varying in length from 300 to 550 ft. each and comprising machine, paint, and wood working shops, 2 story offices, boiler house, etc. About $500,000. James, Loudon & Hertzberg, 36 Toronto St., Toronto, engrs.

Ont., Toronto—Hydro Electric Power Comn. of Ontario, University St., plans to install 5 unit (about 60,000 h.p.) power plant and 200 ft. concrete dam, 43 ft. high, at Cameron Pool. F. A. Hogg, Toronto, engr.

Ont., Toronto—J. Wood Mfg. Co., Conshohocken, Pa., purchased 3⅜ acre site on Coxwell St. here, and plans to build factory. About $50,000.

BIDS DESIRED

Vt., Rutland—Until July 3, by Zipkes, Wolff & Kudroff, archts., 25 West 42nd St., New York City, building 2 story, 50 x 110 ft. brick and steel factory, rein.-con. flooring, concrete foundation, here. About $80,000. Owner's name withheld. Noted June 12.

N. Y., New York—Until June 30, by H. O. Chapman, archt., 334-5th Ave., for 7 story, 130 x 200 ft. brick and steel factory, rein.-con. flooring, concrete foundation, at 543-545 West 43rd St., for Park & Tilford, 529 West 42nd St. Noted June 5.

N. J., Matawan—Until July 1, by Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York City, building two 1 story, 42 x 115 and 42 x 152 ft., rein.-con. and steel factories, rein.-con. flooring, concrete foundation, for A. P. Munning, c/o architects. About $35,000.

Pa., Carlisle—Until June 28, by Lockwood, Greene & Co., archts. and engrs., 101 Park Ave., New York City, building 200 x 475 ft., rein.-con. and steel carpet factory, here, for C. H. Masland & Sons, c/o archt. About $750,000. Noted Apr. 17 under "Harrisburg."

Pa., Phila.—Until June 30, by F. E. Hahn, archt., 1112 Chestnut St., building 1 story, 74 x 154 ft., brick garage for M. Haisfield, Huntington Park Ave. and Broad St.

Pa., West Phila. (Phila. P. O.)—Custer & Gill, archts., 304 Market St., Camden, N. J., receiving bids for 6 story, 80 x 150 ft. storage warehouse here, brick and slow burning construction. About $50,000. Owner's name withheld.

W. Va., Logan—Armour & Co., Logan, receiving bids building pickling plant on Main St. About $150,000. R. C. Clark, Union Stock Yards, Chicago, Ill., archt.

Fla., Jacksonville — Commodore Point Terminal Co., 1949 East Adams St., receiving bids building frame and concrete warehouse on River between Duval and Beaver Sts. About $30,000.

Mich., Pontiac—Pontiac Spring Co., Branch St., receiving bids for 1 story, 100 x 186 ft. factory and 63 x 87 ft. office, concrete, brick and steel, concrete foundation. About $75,000.

Ill., Chicago—A. P. Dippold, archt., 4747 Cottage Grove Ave., receiving bids for 1 story, 100 x 250 ft., brick and timber garage, concrete foundation, at 5547 Harper Ave., for E. C. Leonard, c/o archt. About $90,000.

Ill., Columbia—Until June 30, by Village Clk., improving electric light and power plant in sections as follows: (1) building extensions and machinery foundations, (2) 100 hp. H.R.T. boiler and breeching, (3) 100 ft. x 4 in. concrete chimney, (4) 120 h.p. non-releasing Corlis or Unaflow Engine, (5) heater, boiler feed pump, pipe work and covering, (6) direct connected A. C. generator, exciter, transformer and switch board. Fuller & Beard, Chemical Bldg., St. Louis, Mo., engrs.

Minn., Duluth—Until Aug. 1, by F. H. Fitzgerald, archt., 1402 Alworth Bldg., building 3 story, 75 x 100 ft., brick and terra cotta garage and sales room, rein.-con. flooring, concrete foundation, on Superior St. and 5th Ave., E., for Pioneer Automobile Co., 328 East Superior St. About $60,000.

Minn., Minneapolis—J. W. Cohen, 238 Plymouth Bldg., receiving bids for 4 story, 66 x 112 ft., rein.-con. warehouse on 3rd St. and 1st Ave., N. About $75,000. Buchner & Orth, 500 Schubert Bldg., St. Paul, archt.

Minn., St. Paul—Zinsmaster-Smith Co., 29th Ave., W. and Superior St., Duluth, receiving bids for 3 story, 125 x 160 ft., rein.-con. and brick bakery on Park and Sherburne Aves. About $130,000.

Cal., Merced—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—F. E. and G. W. Johnston, 31 Jersey St., let contract building 4 story, 100 x 225 ft., rein.-con. service garage, rein.-con. flooring, concrete foundation, on Brookline Ave. and Boylston St., to E. S. Butterfield Co., Broad St. About $300,000.

★Mass., Boston—C. C. Whittemore, Massachusetts Ave., let general contract buildin 2 story, 32 x 94 ft., brick and rein.-con. storehouse and factory, rein.-con. flooring, concrete foundation, on Boylston St., to Macdonald & Joslin, 161 Devonshire St., foundation to C. R. Gow Co., 166 Devonshire St. About $50,000. Noted May 15.

★Mass., Gardner—Central Oil & Gas Stove Co. will build 1 story 50 x 120 ft. and 3 story, 40 x 50 ft. brick, steel and concrete addition to factory, rein.-con. flooring, concrete foundation. About $40,000. Work will be done by day labor. Noted May 15.

★R. I., Providence—Brown & Sharpe Mfg. Co., Promenade St., let contract building 6 story steel frame extension to present plant, 3 story mill construction pattern storage plant and 2 story rein.-con. cleaning plant, to Aberthaw Constr. Co., 27 School St., Boston. About $476,000.

★R. I., Providence—J. C. Dran & Sons, 150 Chestnut St., let contract building 7 story timber plant, on Chestnut and Elbow Sts., to C. I. Bigney Constr. Co., 898 Westminster St. About $30,000.

★Conn., Bridgeport—Alling Rubber Co., 1126 Main St., let contract building 3 story, 22 x 70 ft. rein.-con. store room, rein.-con. flooring, concrete foundation, on Middle St., to Schwarz Bros. Co., 95 River St. About $25,000

★Conn., Hartford—Automatic Refrigerating Co., 89 Willow St., let contract altering and building brick, concrete and steel boiler house, rein.-con. flooring, concrete foundation, on Capital Ave. Extension, to Wise & Upson, 36 Pearl St. About $30,000. Noted June 19.

★Conn., Hartford—E. M. Stone, archt. and engr., 327 Trumbull St., let contract, to W. J. Sexton, 43 Lilley Rd., West Hartford, building 6 story, 50 x 250 ft., brick and rein.-con. garage, rein.-con. flooring, concrete foundation, on Ann St., for C. P. Cooley and A. B. Wilson, c/o archt. About $150,000. Noted May 15.

★Conn., Hartford—G. A. Zunner, archt., 756 Main St., let contract, to W. T. Ryan & Son, 149 Barker St., building 1 story, 52 x 102 ft. brick and steel garage, rein.-con. flooring, concrete foundation, for T. Yaffo, 156 Lawrence St. About $25,000. Noted June 12.

★Conn., New Britain—Corbin Screw Co., High St., let contract building 6 story, 60 x 120 ft. brick and mill construction addition to factory, concrete foundation, to J. H. Grozier Co., 721 Main St., Hartford. About $90,000.

★Conn., New Britain—Stanley Wks., Grove Hill and Lake St., will build 1 story, 160 x 160 ft. and 40 x 160 ft. steel and timber additon to factory, concrete foundation, on North Burritt St. About $30,000. Work will be done by day labor.

★Conn., New Haven—New Haven Carriage Co., Walter and Franklin Sts., let contract building 2 story 52 x 160 ft., brick and steel addition to factory, concrete foundation, to Sperry Eng. Co., 82 Church St. About $50,000.

★Conn., New Haven—New Haven Malleable Iron Co., 385 Clinton Ave., let contract building 1 story, 72 x 134 ft., brick and steel addition to factory, rein.-con. flooring, concrete foundation, on Clinton Ave., to J. N. Leonard Co., 902 Chapel St. About $25,000.

★Conn., Norwalk—Pioneer Braid Co., 251 West 90th St., New York City, let contract building 2 story, 56 x 202 ft., brick, steel and concrete factory, concrete foundation, to H. Wales Lines Co., 134 State St., Meriden. About $60,000. Noted June 5.

★Conn., Waterbury—M. A. Doolittle, Watertown Ave., let contract building 2 story, 100 x 150 ft., brick, concrete and steel garage, rein.-con. flooring, concrete and rock foundation, on North Main and North Willow Sts., to Tracy Bros. Co., 52 Benedict St. About $70,000. Noted June 5.

★N. Y., Brooklyn—J. Gaydica, 1433 38th St., will build 1 story, 100 x 180 ft., brick and steel factory, rein.-con. flooring, concrete foundation, on 38th St., between 10th Ave. and Ft. Hamilton Parkway. About $60,000. Work will be done by day labor.

★N. Y., Brooklyn—Kraslow Bldg. Co., c/o M. A. Cantor, archt., 371 Fulton St., will build 1 story, 60 x 90 ft. brick and steel garage, rein.-con. flooring, concrete foundation, on Columbia and Warren Sts. About $25,000. Work will be done by day labor.

★N. Y., Brooklyn — McCormick Co., archts., 41 Park Row, New York City, let contract to Greenmann Co., 350 Fulton St., building 3 story, 45 x 60 ft., brick and steel extension to bakery, rein.-con. flooring, concrete foundation, for B. A. Cushman, 772 Nostrand Ave. About $50,000. Noted Mar. 13.

★N. Y., Brooklyn (Coney Island)—J. Newman, c/o M. A. Cantor, archt., 373 Fulton St., will build 1 story, 100 x 100 ft., brick and steel garage, rein.-con. flooring, brick forundation, on Mermaid Ave. and 16th St. About $25,000. Work will be done by day labor.

Industrial Works (Continued)

★N. Y., Brooklyn—J. Reiter, 157 Atlantic Ave., let contract altering 4 story, 50 x 120 ft., rein.-con. and steel warehouse, rein.-con. flooring, to F. G. Gibbons, 316 Columbia St. About $25,000.

★N. Y. Brooklyn—Saba Constr. Co., 44 Court St., will build 1 story, 100 x 120 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on 29th St., between 3rd and 4th Aves. About $30,000. Work will be done by day labor.

★N. Y., Buffalo—Culliton Ice Cream Co., 172 Guilford St., let contract building brick and concrete ice cream and ice plant adjacent to present plant, to Shautz Eng. Co. About $100,000.

★N. Y., Jamestown—Art Metal Constr. Co., Jones St. and Ave. G., let contract building 4 story, 120 x 380 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, to J. W. Ferguson, United Bank Bldg., Paterson, N. J. About $550,000.

★N. Y., Long Island City—Steinway & Sons, 107 East 14th St., New York City, let contract building rein-con. and steel factory addition, rein.-con. flooring, concrete foundation, on Ditmar Ave. between 15th and 16th Aves. here, to W. Koch, Elmhurst. About $75,000. Noted May 29.

★N. Y., New York—T. G. Carvon, 125 West 53rd St., will alter interior and exterior of 5 story, brick and steel garage, at 127-129 West 31st St. About $25,000. Work will be done by day labor.

★N. Y., New York—Morania Realty Co., 427 West 14th St., let contract building 2 story, 92 x 200 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on 18th St. and 10th Ave., to I. Hopper & Son, 15 East 40th St. About $100,000. Noted May 22.

★N. Y., New York—A. B. Meyer c/o L. A. Sheinart, archt., 194 Bowery, will build 1 story, 100 x 129 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Amsterdam Ave. and 184th St. About $25,000. Work will be done by day labor.

★N. Y., North Tonawanda—Buffalo Bolt Co., Tonawanda, let contract building 80 x 170 ft. addition to rolling mill and 40 x 340 ft. addition to tumbling room, to Lackawanna Bridge Co., Bell and Abby Sts., Buffao. About $60,000.

★N. Y., North Tonawanda—Frontier Chocolate Co. let contract building 1 story, 82 x 154 ft., rein.-con. warehouse, concrete foundation, on Payne Ave., to Morris & Allen, Builders' Exch., Buffalo. About $30,000. Cost plus percentage basis.

★N. J., Avenel—Steel Equipment Corp. let contract building 2 story, 80 x 160 ft., rein.-con. and brick factory, to Austin Co., Bulletin Bldg., Philadelphia.

★N. J. Bound Brook—Bound Brook Oilless Bearing Co., Main St., let contract building 2 story, 100 x 140 ft., rein.-con. and steel factory, rein.-con. flooring, concrete foundation, to Austin Co., 217 Bway., New York City. About $85,000.

★N. J., Newark—A. De Cozen, 20 Branford Pl., let contract building 1 story, 95 x 260 ft., concrete and brick garage and service station, to Essex Constr. Co., 85 Academy St. About $45,000.

★Pa., Altoona—W. H. & L. C. Wolfe, 1011 Chestnut Ave., will build 3 story, 50 x 133 ft., rein.-con., steel and brick garage and repair shop, rein.-con. flooring, rock foundation, on Chestnut Ave. and 10th St. About $75,000. Work will be done by day labor.

★Pa., Pittsburgh—Duff Mfg. Co., Preble Ave., let contract building 1 story, rein.-con and steel forge shop, concrete foundation, on Preble Ave. near Island Ave., to Austin Co., Union Arcade. About $36,000.

★Pa., Pittsburgh—Pittsburgh Ice Cream Co., 121 2nd Ave., will build 2 story, 100 x 163 ft. brick plant, concrete foundation on Jackson and Irwin Aves. About $50,000. Work will be done by day labor.

★Pa., Pittsburgh—Seventeenth St. Garage Co. let contract building 4 story, 80 x 100 ft. fireproof garage, rein.-con. flooring, concrete foundation, on 17th St. and Penn Ave., to H. Miller & Sons, May Bldg. About $90,000. Noted May 22.

★Pa., Pittsburgh—Walker Chemical Co., 810 House Bldg., let contract constructing 1 story, 30 x 50 ft., 40 x 50 ft. and three 1 story, 50 x 50 ft. rein.-con. and steel industrial buildings, rein.-con. flooring, concrete foundation, to Truscon Steel Co., Youngstown, O.

HIGHWAY—WASHINGTON

Bids were received by State Highway Commission, Olympia, (lowest 3) for constructing highway in Kelso Co., from (A) General Cnstr. Co., Spokane, (awarded contract); (B) Nettleton, Bruce, Eschbach & Co., Amer. Bank Bldg., Seattle; (C) Rojotte, Fobert & Winters, 343 East 24th St., N., Portland, Ore. The unit bids were as follows:

	A	B	C
187,295 cu.yd. common excavation, including haul of 400 ft	$0.36	$0.48	$0.57½
1,930 cu.yd. solid rock excavation, including haul of 400 ft	1.80	1.80	1.75
2,160 cu.yd. loose rock excavation, including haul of 400 ft	.70	.78	.80
493,100 cu.yd. overhaul on any of above materials, per sack 100 lb.	.03	.025	.035
20.2 acres clearing	175.00	110.00	225.00
11.7 acres grubbing	360.00	225.00	250.00
Cu.yd. rip rap hand placed	5.00	5.00	3.00
200.8 cu.yd. concrete first class box culverts and retaining walls	19.75	23.00	24.00
556.0 cu.yd. concrete, first class port'l Xing. Trsle. Br	27.00	23.00	24.00
65.0 cu.yd. concrete, second class	16.50	21.50	20.00
64,410 lb. steel reinforcing bars in place	.065	.065	.08
36 M.b.m. timber and plank in place, including spikes and bolts	45.00	46.75	35.00
1,760 lin.ft. piling in trestle	.60	.70	.90
780 lin.ft. piling in abutments	.80	.70	1.50
140 lin.ft. porous tile, 6-in.	.25	.35	.40
1,416 lin.ft. plain concrete pipe in place, 12-in. diameter	1.40	1.35	1.50
406 lin.ft. reinforced concrete pipe in place, 18-in. diameter	2.70	2.90	3.25
394 lin.ft. reinforced concrete pipe in place, 24-in. diameter	3.55	4.20	4.50
68 lin.ft. reinforced concrete pipe in place, 30-in. diameter	4.65	5.40	6.00
17,000 cu.yd. gravel surfacing	2.60	2.23	2.50
Extended totals	$171,518	$181,764	$214,339

PIPE CULVERT—ROME, N. Y.

Bids were received by E. S. Walsh, supt. of pub. wks., Capitol, Albany, for constructing 8 ft. pipe culvert across Barge Canal, here, from (A) Scott Bros., Arlington Blk.; (B) Troy Pub. Wks. Co., 98 City Natl. Bldg., Utica; (C) Mohawk Dredge & Dock Co., Manion Blk., Herkimer; (D) Robert Provo, 105 Hiawatha St., $73,741. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
11,000 cu.yd. excavation	$1.10	$0.71	$1.15
2,700 cu.yd. forming embankment	.18	.15	.20
730 cu.yd. wash wall	4.00	4.50	4.00
20.2 M.ft.b.m. wooden sheet piling	110.00	120.00	110.00
455 lin.ft. foundation piles	.80	.82	.70
460 cu.yd. second-class concrete	12.00	12.00	14.00
7,900 sq.ft. wire mesh reinforcement	.05	.06	.06
0.85 M.ft.b.m. sawed lumber (yellow pine)	100.00	120.00	100.00
160 lb. metal reinforcement	.07	.07	.07
164,000 lb. metal in culvert pipe	.127	.15	.14
Cofferdams, pumping, bailing and draining (lump sum)	1,800.00	3,900.00	3,500.00
Extended totals	$46,731	$48,904	$52,121

HIGHWAY—CALIFORNIA

Bids were received by State Highway Comn., Forum Bldg., Sacramento, for constructing highway in Trinity Co., Div. 2. Route 20, Sect. "E," from (A) F. Rolandi, 550 Montgomery St.; (B) Erickson & Peterson, Inc., Monadnock Bldg.; (C) Palmer & McBryde, Hooker & Lent Bldg.; (D) W. A. Bechtel, $305,391. Contractors all of San Francisco. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
140,000 cu.yd. (excavation without classification) rubble masonry	$1.45	$1.50	$1.32
500 cu.yd. (retaining walls) dry rubble	9.50	15.00	9.00
1,800 cu.yd. (retaining walls) Portland cement concrete	7.50	10.00	6.00
950 cu.yd. Concrete Class "A" (culverts and monuments)	44.00	50.00	35.00
900 lin.ft. 12-in. corrugated metal pipe	1.50	2.00	1.25
1,800 lin.ft. 18-in. corrugated metal pipe	2.25	2.25	1.50
1,400 lin.ft. 24-in. corrugated metal pipe	2.75	2.75	2.50
1.0 mi. new property fences	450.00	350.00	200.00
1.0 mi. moving and resetting property fences	300.00	250.00	200.00
498 monuments	2.50	2.50	2.50
Extended totals	$242,320	$274,295	$294,545

★Md., Baltimore—Universal Garage Co., Fulton and Pensylvania Aves., let contract building 1 story, 98 x 350 ft., rein.-con., steel and brick garage, cement flooring, brick and concrete foundation, to J. J. O'Connor, 52 Knickerbocker Bldg., $56,500. Noted Apr. 17.

☆Md., Baltimore—Zell Motor Co., 11-15 East Mt. Royal Ave., let contract building 3 story, 60 x 70 ft., rein.-con. garage and showrooms, cement flooring, concrete foundation, on Mt. Royal Ave., near Charles St., to West Constr. Co., 907 Amer. Bldg. About $50,000. Noted May 22.

★Md., Hagerstown—Hagerstown Welding & Automobile Wks., Virginia Ave., let contract construction of 2 story, 40 x 100 ft. and 1 story, 40 x 50 ft., concrete block and steel buildings, concrete foundation, on Virginia Ave., to J. B. Wolfhill, Hagerstown. About $50,000.

★Md., Westminster—Klee & Hoff let contract building 2 story, 60 x 198 ft., rein.-con. and brick garage, cement concrete foundation, to J. F. Roystone Eng. Co., Westminster. About $60,000; commission basis.

★Md., South Baltimore—Standard Guano Co., 1214 Continental Bldg., Baltimore, will build 2 story, 104 x 400 ft., rein.-con. and steel fertilizer factory, rein.-con. flooring, concrete foundation, on Aspen St. near Pennington Ave. About $96,000. Work will be done by day labor.

★N. C., Raleigh—International Vegetable Oil Co. plans to build addition to oil plant here. About $30,000. Work will be done by day labor.

★O., Akron—J. A. Rohner Paper Co., 803 South High St., let contract building 3 story, 50 x 163 ft., steel and brick warehouse, on South High St., to C. Rublin, 201 Cross St. About $50,000.

★O., Cleveland—Nickel Plate Fdry. Co., 1834 Charles Rd., let contract building 1 story, 96 x 160 ft., concrete, steel and brick foundry, on Woodworth and Coit Rds., to A. A. Lane Constr. Co., 1836 Euclid Ave. About $40,000.

★O., Dayton—Union Storage Co., East State St., let contract building 5 story, 78 x 100 ft., rein.-con. warehouse, rein.-con. flooring, concrete foundation, to Frank Hill Smith Co., Inc., East 3rd St. About $74,000. Noted June 5.

O., Troy—See "Buildings."

★Mich., Detroit—General Motors Corp. Boyer Bldg., let contract building 1 story, 360 x 600 ft., differential shop and 2 story, 30 x 360 ft. office, concrete, brick and steel monitor type, concrete foundation, also 500 ft. concrete platform, to W. E. Wood Co. 1805 Ford Bldg. Noted May 29.

★Ill., Chicago—Anchor Leather Co., Division and Hickory Sts., let masonry contract for 3 story, 104 x 148 ft., mill construction factory, and 1 story boiler house, concrete foundation, to Van Etten Bros., 143 East 111th St. About $65,000.

★Ill., Chicago—J. Clemenssen Co., 2607 Flournoy St., let contract building 3 story, 80 x 195 ft., rein.-con. factory, rein.-con. flooring, concrete foundation, at 3401 Potomac Ave., to R. F. Wilson & Co., 1851 Elston Ave. About $200,000.

★Ill., Chicago—Western Felt Wks., 4115 Ogden Ave., let contract building 3 story, 95 x 140 ft. factory, 3 story, 100 x 115 ft. warehouse, and 2 story, 95 x 140 ft. factory, rein.-con., rein.-con. flooring, concrete foundation, at 4045 Ogden Ave., to Scown Bldg. Co., 36 West Randolph St. About $200,000.

Industrial Works (Continued)

★Ill., East Moline—Moline Plow Co., 1420-3rd Ave., let contract building 2 story, 120 x 350 ft. rein.-con. and steel foundry, on 4th St., to H. W. Horst Co., Horst Bldg., Rock Island. About $275,000.

★Wis., Green Bay—Ft. Howard Paper Co. let contract building 1 story, 49 x 135 ft. brick, concrete and steel factory, rein.-con. flooring, concrete foundation, to L. Hansen, Green Bay. About $45,000. Noted Mar. 20.

Wis., Milwaukee—R. A. Johnston Co., 270 Florida St., let contract building 7-story, 185 x 310 ft. rein.-con., brick and steel factory, rein.-con. flooring, concrete foundation on 24th St. and National Ave., to G. A. Fuller Co., 418 B'way. About $500,000. Noted Feb. 13.

★Wis., Milwaukee—Pfister & Vogel Leather Co., Virginia St., let contract building 2 story, 60 x 180 ft. brick and mill construction addition to tannery, rein.-con. flooring, concrete foundation, on Bayview St., to C. A. Kleppe, 1026 1st St. About $30,000.

★Wis., Milwaukee—O. Schoenloeber, c/o Ambrosia Chocolate Co., 331-35 5th St., let contract building 2 story, 50 x 95 ft. brick and mill addition to factory, to Northern Constr. Co., Colby-Abbot Bldg. About $30,000. Noted June 5.

★Wis., Milwaukee—T. M., E. R. & L. Co., Pub. Serv. Bldg., let contract building 2 story, 60 x 80 ft. brick, rein.-con. and steel power station, rein.-con. flooring, concrete foundation, on 26th and Burnham Sts., to R. L. Reisinger, 1st Natl. Bank Bldg. Noted June 12.

★Wis., Milwaukee—West Side Buick Co., 2713 Grand Ave., let contract remodeling and building 2 story, brick, rein.-con. and steel addition to garage, rein.-con. flooring, concrete foundation, at 2713 Grand Ave., to Klug & Smith, Mack Bldg. About $27,000.

★Mo., Kansas City—E. Shukert, 1113 McGee St., will build 10 story, rein.-con. warehouse, rein.-con. flooring, on 26th St. and Grand Ave. Work will be done by day labor.

★Mo., St. Louis—Washington University Corp., 712 Spruce St., will build 3 story, 150 x 250 ft., rein.-con., steel and brick machine shop and mercantile building, rein.-con. flooring, concrete foundation, at 1815-29 Locust St. About $200,000. Work will be done by day labor. Noted June 19.

Ariz., Florence—See "Miscellaneous."

★Wash., Seattle—J. M. Colman Co., Colman Dock, let contract building 1 story, 139 x 150 ft. garage, machine shop, etc., covering 16,800 sq. ft. rein.-con. floor space, and concrete foundation, at 74-84 Jackson St., to J. A. McEachern Co., Bell St. Dock. About $55,000.

★P. E. I.—North Wiltshire—Dept. Pub. Wks., Ottawa, let contract building 2 story, concrete and timber power house and laundry, at Dalton Sanitorium, here, to Phillips & Mutch, Charlottetown. About $68,250. Noted May 8.

★Que., Granby—Miner Rubber Co., St. Peter St., let contract building steel and brick factory, to Dominion Bridge Co., 285 Beaver Hall Hill, Montreal. About $35,000.

★Ont., Toronto—Canadian Ice Machine Co., 82 Chestnut St., let contract building brick factory, to Frid Constr. Co., 65 Adelaide St. E. About $40,000. Noted Apr. 24.

★Ont., Walkersville — General Motors Corp., Brush and Congress Sts., Detroit, Mich., let contract building two 160 x 600 ft., steel motor assembling and axle plants, concrete foundation, including railroad siding and concrete loading platform, here, to W. E. Wood Co., 1805 Ford Bldg., Detroit. Noted Oct. 10.

Buildings

PROPOSED WORK

Mass., Boston—Office—Boston Globe Co., 244 Washington St., having plans prepared by E. Rawson, archt., 6 Beacon St., for office building on Washington St.

Mass., Boston—Sales—See "Industrial Works."

Mass., Holyoke — Store—Holyoke Dry Goods Co., 93 Hillside Ave., plans to build on High St. About $175,000. J. Zielinski, secy. Architect not selected.

Mass., New Bedford—Hotel—New Bedford Hotel Co., Pleasant St., plans to build 250-room hotel. About $500,000. B. Anthony, treas.

Mass., Springfield—Parish—Grace Episcopal congregation, 9 Kensington Ave., plans to build 2 story brick parish house, on Springfield and South Sts. About $50,000. Address, G. M. Burgess, pastor. Architect not selected.

R. I., Thornton—School—Hoppin & Field, archts., 32 Westminster St., Providence, receives bids about July 2, building 2 story, 80 x 150 ft. fireproof school, rein.-con. flooring, concrete foundation, here, for Johnston Twp. About $120,000. Noted May 8.

Conn., Bridgeport—Business, etc.—Middle St. Realty Co., 1188 Main St., plans to build 6 story business and loft building on Middle St. About $175,000.

Conn., Bridgeport—Office—See "Industrial Works."

Conn., Bristol—Club—Bristol Boys Club, Main St., plans to build fireproof club house on Church St. About $60,000. Architect not selected.

Conn., Hartford—Bank and Office—Connecticut Trust & Safe Deposit Co., 777 Main St., plans to erect bank and office building on Main St. and Central Row. About $750,000. Architect not selected.

Conn., Hartford—Bank—Mutual Bank & Trust Co., 18 Asylum St., plans to build 2 story, brick and marble, on Pearl St. About $100,000. I. A. Allen, Jr., 904 Main St., archt.

Conn., Manchester—Business—T. C. Hardie, 72 Russ St., Hartford, having plans prepared by F. C. Walz, archt., 348 Trumbull St., Hartford, for 3 story, brick, concrete and steel, rein.-con. flooring, concrete foundation, on Main and North School Sts., here. About $50,000.

Conn., Manchester—Fire Station—Town plans to build brick, concrete and steel fire house, on Main and Hillside Sts. About $50,000. Address J. F. Limerick, 75 Main St. Architect not selected.

Conn., Middletown—Housing—Middletown Housing Assn., 303 Main St., plans to build one hundred and fifty 1 and 2 story workmen's houses, on various streets. About $700,000. E. B. Caldwell, Jr., 886 Main St., Bridgeport, archt.

Conn., New Haven—Church—R. Williams, archt., 185 Church St., soon receives bids building brick and stone, brick, rock and concrete foundation, on Elm St., for 1st Baptist congregation. About $60,000.

Conn., New London—Hospital—J. Lawrence Hospital, Ocean Ave., receives bids in July for 3 story, 40 x 90 ft. brick, rein.-con. flooring, concrete foundation. About $100,000. Kendall, Taylor & Co., 93 Federal St., Boston, engrs.

N. Y., Adams—Bank — Citizens Natl. Bank soon receives bids remodeling and enlarging present building, concrete and brick. Cost between $50,000 and $60,000. Address C. N. Bank, Adams. D. D. Kieff, Flower Bldg., Watertown, archt. Noted June 19.

N. Y., Brooklyn—Synagogue—M. Whinston, archt., 63 Park Row, New York City, receives bids about July 8, building 2 story, 50 x 92 ft. brick, stone and steel, brick foundation, on Vermont Ave., near Sutter Ave., for Congregation Sechoi Thoras Moses, 369 Vermont Ave. About $60,000. J. Goldberg, pres.

N. Y., Buffalo—Church—Lansing, Bley & Lyman, archts., Delaware Ave., soon receive bids for 1 story, 60 x 87 ft. brick, rein.-con. and steel, rein.-con. flooring, concrete foundation, on Southampton St., for Emmans Lutheran congregation. About $75,000. E. A. Mueller, pastor.

N. Y., Buffalo — Office — Lansing Bley & Lyman, archts., Delaware Ave., soon receive bids building 2 story, 104 x 217 ft. and 104 x 140 ft. rein.-con., rein.-con. flooring, concrete foundation, on Delaware Ave., for W. K. Jackson, Buffalo. About $225,000.

N. Y., Mechanicsville—School—Bd. Educ. receiving competitive plans for 16 room school on Main St.

N. Y., New York—Auditorium and Office—Metropolitan Life Insurance Co., 1 Madison Ave., having plans prepared by D. E. Waid, archt. and engr., 1 Madison Ave., for 16 story, 75 x 150 ft., brick, stone and steel, brick foundation, at 11-15 Madison Ave. About $800,000.

N. Y., New York—Hotel—D. M. Linard Co., c/o Warren & Wetmore, archts., 16 East 47th St., having plans prepared for 180 x 200 ft., brick, stone and steel, brick foundation, on Park Ave. and 51st St. About $7,500,000.

N. Y., New York—Theatre—Plaza Theatre, 59th St. and Madison Ave., having plans prepared by T. W. Lamb, archt., 644 8th Ave., for 2 story, 40 x 60 ft. brick and steel addition, brick foundation. About $50,000.

N. Y., Niagara Falls—Bank—Niagara Co. Savings Bank, 304 Niagara St., soon lets contract building 3 story, 60 x 90 ft. brick, on 3rd St. Cost between $75,000 and $100,000. C. M. Young, pres.

N. Y., Rochester—School—Bd. Educ. soon receives bids building P. S. No. 31, on North Goodman St. About $250,000.

N. Y., Schenectady—Theatre—M. Speigel, Strand Theatre Bldg., New York City, having plans prepared by DeRosa & Pereira, archts. and engrs., 110 West 40th St., New York City, altering interior and exterior of 2 story brick, steel and stone theatre, here. About $100,000.

N. Y., Tonawanda—Auditorium, etc.—O. Johnstone, archt., North Tonawanda, soon receives bids building 3 story brick and concrete auditorium and gymnasium here, for Chamber of Commerce. About $125,000. H. P. Smith, chn.

N. Y., Utica—High School—Bd. Educ. having plans prepared by Kiehm & Jennison, archts., Utica, for Junior High School in 16th Ward. About $250,000.

N. Y., Watertown — Bank—Watertown Natl. Bank, 100 Court St., having plans prepared and will soon receive bids remodeling present building and erecting new vaults; also adding steel reinforcement and new marble front. About $75,000. Address W. W. Rice, c/o owner.

N. J., Elizabeth—School — Bd. Educ. plans to build school at Bayway and South Broad St. About $350,000.

N. J., Montclair—School—Bd. Educ. having plans prepared by Starrett & Van Vleck, archts. and engrs., 8 West 40th St., New York City, for 1 story, brick and steel addition, brick foundation, on Edgemont St. About $55,000.

N. J., Plainfield — School—Wilder & White, archts., 50 Church St., New York City, receive bids about July 19, building 2 story, 55 x 150 ft., brick and steel, brick foundation, on Emerson Ave., for Bd. Educ. About $140,000. Noted June 19.

Pa., Harrisburg—Theatre — P. Magaro, 410 Market St., soon lets contract altering and building 2 story, 52 x 210 ft. steel, brick and timber addition. About $50,000. Henan-Hoffman, Finance Bldg., Phila., archts.

Pa., Phila.—Theatre—H. C. Hogens, archt., 1312 Walnut St., receives bids in about 3 weeks, building 2 story, 100 x 200 ft. concrete and brick, on Germantown and Lehigh Aves. About $200,000. Owner's name withheld. Noted May 1.

Pa., Tamaqua—High School—Bd. Educ. plans to build high school and campus. About $300,000.

Md., Baltimore—Schools—Bd. School Comrs. having plans prepared by C. N. Osborn, bldg. inspector, building School No. 76 at Latrobe Park and Fort Ave., cost $350,000; School No. 65 on Poplar Grove St. and Lafayette Ave., $200,000; one on 33rd St. Blvd. and Montebello Park and one on Falls Rd. and 36th St., West Park, cost between $200,000 and $250,000 each; all concrete and brick, concrete and stone foundations. Noted Feb. 13 and Apr. 17.

Md., Salisbury—Hotel—Shoreman Hotel Corp. plans to build 7 story, concrete, steel and brick, stone and concrete foundation. Address J. W. Miles, U. S. Custom House, Baltimore, or M. Cooper, c/o Wicomico Bldg. & Loan Assn., Salisbury.

Md., Towson—Sanatorium—State Tuberculosis Comn. has acquired 50 acre site adjoining Eudowood Sanatorium, near here, and plans to build sanatorium. About $75,000 appropriated for project. S. K. Dennis, 2 East Lexington St., Baltimore, secy.

Va., Portsmouth — School — Bd. Educ. soon lets contract building 3 story, 67 x 163 ft. About $60,000. J. G. Wilson, clk. C. M. Robinson, Times Bldg., Richmond, archt.

W. Va., Parkersburg—Bank—First Natl. Bank of Parkersburg purchased site on 7th and Market Sts., and plans to build 1 story, 26 x 90 ft. brick. About $60,000. Architect not selected.

N. C., Greensboro—Dining Hall—State Bldg. Com., Raleigh, soon receives bids building dining hall at State College for Women, here. About $50,000. L. R. Woodhull, Raleigh, engr.

Buildings (Continued)

N. C., Greenville—School—State Bldg. Com., Raleigh, soon receives bids building 2 or 3 story school. Cost between $75,000 and $100,000. L. R. Woodhull, Raleigh, engr.

N. C., Kinston—School—State Bldg. Com., Raleigh, soon receives bids building school. About $150,000. L. R. Woodhull, Raleigh, engr.

N. C., Raleigh—Agriculture—State Bldg. Com. soon receives bids constructing brick, agricultural building. About $250,000. L. R. Woodhull, Raleigh, engr. Noted Apr. 24.

S. C., Charleston—High School—Bishop England High School launched campaign to raise $50,000 to build new high school on Calhoun St.

S. C., Orangeburg—Jail—Comrs. Orangeburg Co. plan to build 3 story, 50 x 80 ft. brick, rein.-con. flooring, brick foundation, near Public Sq. About $80,000. J. C. Johnson, 1006 Palmetto Bldg., Columbia, archt.

S. C., York—School—School Bd. receives bids about Sept. 1, building 2 story, 100 x 150 ft., brick, brick foundation. About $110,000. C. C. Wilson, 804 Palmetto Bldg., Columbia, archt.

Ga., Albany—Masonic Temple—Edwards, Sayward & Leitner, archts., Chamber Commerce Bldg., Atlanta, receive bids about Aug. 1, building 6 story, 60 x 100 ft., for Masons. About $100,000.

Ga., Atlanta — Synagogue — Ahavath Achim congregation purchased site on Washington and Gilmer Sts. and plans to build. About $75,000. J. Dorfan, pres.

La., New Orleans—Bank—Whitney Central Natl. Bank, St. Charles and Gravier Sts., plans to build 14 story, 100 x 200 ft., brick, on Common St. About $1,500,000.

O., Akron—Office—P. R. Snyder, 154 North Union St., plans to build 10 story, 23 x 66 ft., on Main and Exchange Sts. Architect not selected.

O., Akron—Restaurant, etc.—Henry & Murphy, archts., 2nd Natl. Bank Bldg., soon let contract building 3 story, 50 x 165 ft., rein.-con., steel and brick, concrete foundation, on South Main St., for F. M. Leatherman, State Bank Bldg. About $50,000. Noted May 8.

O., Cleveland—Commercial—Altman Furniture Co., 2142 East 9th St., had plans prepared by Christian, Schwartzenberg, Gaede Co., archts., 1900 Euclid Bldg., for 4 story, 48 x 117 ft., rein.-con., steel and brick, on East 152nd St. and St. Clair Ave. About $75,000.

O., Cleveland—Commercial—C. Graber, 15703 Detroit Ave., preparing plans for 3 story, 67 x 94 ft., concrete, steel and brick. About $100,000.

O., Cleveland — Hospital — Evangelical Deaconess Society, West 33rd St. and Pearl Rd., plans to build 3 story, 100 x 150 ft., concrete, steel and brick. About $150,000. Architect not selected.

O., Cleveland—School—Bd. Educ. plans to build 2 story, 80 x 100 ft., concrete, steel and brick, on Miles Ave. About $200,000. H. R. McCormack, East 6th St. and Rockwell Ave., archt. and engr.

O., Cleveland—School—Bd. Educ. plans to build 2 story, 100 x 100 ft., concrete, steel and brick, on Eddy Rd. About $250,000. H. R. McCormack, East 6th St. and Rockwell Ave., archt. and engr.

O., Columbus—Cottages—Bd. Administration, Oak St., preparing plans for five 2 story, brick, at Institution of Feeble Minded, West Broad St. About $220,000.

O., Columbus—Theatre—W. B. James Co., West Broad St., plans to build 3 story, 104 x 187 ft., steel and brick, on West Broad St. About $600,000. C. H. Crane and W. G. Kiehler Co., Dime Bank Bldg., Detroit, Mich., archts.

O., Dayton — Business — Metropolitan Clothing Store, 4th and Ludlow Sts., plans to build 3 story, 78 x 105 ft., steel and brick addition to present building. About $75,000. J. H. Margolis, owner. Architect not selected.

O., Dayton—Sales—Stomps Auto Sales Co., 330 South Jefferson St., plans to build 4 story, 60 x 150 ft., rein.-con., rein.-con. flooring, concrete foundation, on South Main St. About $65,000. A. Ostendorf, 833 South Clement Ave., archt.

O., Gallipolis—Cottages — Bd. Administration, Oak St., Columbus, had plans prepared by Richards, McCarty & Bulford, archts., Hartman Bldg., Columbus, for two 2 story, brick, at Epileptic Hospital, here. About $88,000.

O., Miamisburg—High School—City plans election soon to vote on $150,000 bonds to build high school.

O., Toledo—Welfare Farm House—City soon receives bids building 2 story, 82 x 128 ft., concrete and brick, concrete foundation, on Work House Farm. About $50,000. F. R. Creswell, 305 Valentine Bldg., archt.

Mich., Bay City—Schools—Union School Dist. plans to build Senior High School, about $600,000; build or alter, repair or reconstruct present east side school for use as Junior High School, $100,000; West Side School, $300,000.

Mich., Detroit — Parish House — Grace Episcopal congregation, c/o Smith, Hinchman & Grylls, archts., 710 Washington Arcade, having plans prepared for 3 story concrete, brick and steel, concrete foundation, on Virginia Park and 12th St. About $76,000.

Mich., Detroit—Theatre—Loop Theatre Co., c/o J. M. Townsend, archt., 255 West Hancock St., having plans prepared for 2 story, 82 x 120 ft., rein.-con. brick and steel, rein.-con. flooring, concrete foundation, on Grand River Ave. and Beverly Court.

Mich., Grand Rapids—Church—Central Church of Christ, Sherry St. and Madison Ave., having plans prepared for 1 story, 176 x 176 ft., brick, steel and stone, brick foundation. T. S. Ethridge, chn. bldg. com.

Mich., Lansing—Hospital—City election July 26 to vote on $100,000 for detention hospital.

Mich., Wyandotte—High School — City having plans prepared by B. C. Wetzel & Co., archts., 2317 Dime Bank Bldg., Detroit, for 2 story, 150 x 350 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on Superior and 3rd Sts. About $400,000.

Ill., Joliet—Store—L. F. Beach & Co. having plans prepared for 4 story, 45 x 150 ft., rein.-con. department store, rein.-con. flooring, concrete foundation, on Cass St. and Chicago Ave. About $150,000. D. H. Burnham & Co., 209 South La Salle St., Chicago, archts.

Ill., Mooseheart—Memorial—L. O. O. M., Mooseheart, having plans prepared by C. P. Berger, archt. 1416 South Penn Sq., Philadelphia, for 2 story, 66 x 135 ft. cement block memorial building here. About $75,000.

Wis., Delavan — Dormitory — Bradley Knitting Co. plans to build 2 story, 100 x 136 ft., concrete and brick dormitory, to include gymnasium, swimming pool and dance hall. About $80,000.

Wis., Janesville — School — St. Patrick's Catholic congregation had plans prepared by Van Ryn & De Gelleke, archts., Caswell Blk., Milwaukee, for 2 story, 80 x 110 ft., brick and mill construction, concrete foundation. About $60,000. Address E. E. Reilly, 315 Cherry St.

Wis., Milwaukee — Church — Bethany Evangelical Lutheran congregation soon lets contract building 1 story, 60 x 131 ft., brick, rein.-con. and stone, rein.-con. flooring, concrete foundation, on 38th St. and Lisbon Ave. About $50,000. H. H. Steege, 690 33rd St., pastor. H. H. Bruns, 845 26th St., archt.

Wis., Milwaukee—Dormitory — Big Sisters' Home, 469 Hanover St., plans to build rein.-con. and brick, rein.-con. flooring, concrete foundation. About $75,000. R. M. Purdue, supt. Architect not selected.

Wis., Milwaukee—School—School Bd., 10th and Prairie Sts., soon lets contract building 2 story, brick, rein.con. and steel, rein.-con. flooring, concrete foundation, on 27th St. and Grand Ave. Van Ryn & De Gelleke, Caswell Blk., archts. Noted Feb. 6.

Wis., Washburn — High School — City election soon to vote on $100,000 bonds to build high school.

Wis., West Allis—Church—First Baptist congregation having sketches prepared by Herbst & Kuenzli, archts., 722 Caswell Blk., Milwaukee, for 1 story, brick and stone, concrete foundation on 77th Ave. About $50,000. Rev. F. F. Parson, 679 77th Ave., pastor.

Ia., Clinton—High School — A. H. Paddock, secy. bd. educ., receives bids in August building 2 story, 206 x 226 ft. brick, stone or terra cotta, to include chemistry room, offices, library, heating plant, swimming pool, etc. About $300,000. Miller, Fullenwider & Dowling, 6 North Michigan Ave., Chicago, archts. Noted June 5.

Ia., Sioux City—Administration—Lutheran Hospital soon receives bids building 3 story, 39 x 110 ft., rein.-con. and brick, rein.-con. flooring, rock and brick foundation. About $80,000. Beuttler & Arnold, 230 Grain Exch., archts.

Minn., East Grand Forks—Schools—Bd Educ. receives bids about July 5 building concrete and brick grade school, brick foundation, cost, $50,000; concrete high school, rein.-con. flooring, brick foundation, $150,000. B. D. Keck, 1st Natl. Bank Bldg., Grand Forks, N. D., archt.

Minn., Minneapolis—School—Bd. Educ. receives bids about July 28, building 2 story, 60 x 194 ft., rein.con., rein.-con. flooring, on 19th Ave., N. E., and Pierce St., to be known as Whitney School. About $75,000. E. H. Enger, 305 City Hall, archt.

Minn., Mountain Lake—Hospital—City having plans prepared by Jacobson & Jacobson, archts., Owatonna, building 3 story, rein.-con. and brick community hospital. About $75,000. F. Tustison, 355 Auditorium Bldg., Minneapolis, engr.

Kan., Arkansas City—Memorial Hall—City plans election soon to vote on $100,000 bonds to build memorial hall. W. L. McAtee, Arkansas City, archt.

Kan., Atchison—Schools—City voted $125,000 bonds to build and improve schools. W. H. Sayler & Co., 300 Reliance Bldg., Kansas City, Mo., archts.

Kan., Girard—Court House and Jail—Crawford Co. plans to build 3 story, here. About $300,000. Tonini & Bramblett, 417 Terminal Bldg., Oklahoma, Okla., archts.

Kan., Pittsburg—School—Bd. Educ. plans election soon to vote on $275,000 bonds to build school.

Neb., Omaha—Stores—Burgess-Nash Co., 16th and Harney Sts., had preliminary plans prepared by G. B. Prinz, archt., 1037 Omaha Natl. Bank Bldg., for 8 story, 88 x 152 ft., on 17th and Harney Sts. About $600,000.

Neb., Superior—School—School Bd. having plans prepared by E. Davis, archt., Lincoln, building 2 story, brick, rein.-con flooring, concrete foundation. P. Johnson, pres. About $100,000.

S. D., Freeman—College—Freeman Mennonite College plans to build 3 story. About $100,000. A. J. Regier, pres.

S. D., Tyndall—Bank—Security Bank soon receives bids building 1 story, 40 x 70 ft. brick and stone. About $50,000. A. Moorman & Co., 501 Minnesota Bldg., St Paul, Minn., engrs. and archts.

N. D., Rolla—Temple — Rolla Masonic Lodge plans to build 3 story, 43 x 74 ft. brick. About $50,000. J. A. Shannon, Jamestown, archt.

Wyo., Thermopolis—High School—Hot Springs Co. election soon to vote on $50,000 bonds to build county high school. W. A. Woodrow, co. clk. Architect not selected.

Mont., Deer Lodge—Court House—Powell Co. election Sept. 2 to vote on $100,000 bonds to build new court house.

Mont., Deer Lodge — Municipal — City Council plans to construct building. About $300,000.

Mont., Havre—Church—St. Jude Thaddeus Church plans campaign to raise $100,000 to build church.

Mont., Lewiston—High School—Fergus Co. election Sept. 2 to vote $150,000 bonds to build 2nd unit of high school.

Mont., Lewistown—School—Bd. Educ. having plans prepared by Link & Haire, archts., 317 Electric Bldg., Billings, for high school. About $300,000.

Buildings (Continued)

Mo., St. Louis—Church—St. Mark's Lutheran congregation plans to build 1 story, 60 x 90 ft., brick and stone, rock foundation, on Forest St. and Clayton Ave. About $55,000. W. E. Wheeler, 4908 Euclid Terrace, pastor. Architect not selected.

Mo., St. Louis—Schools — Bd. Dir. of Washington University Corp., Skinker and Lindell Sts., considering plans to build three, 2 story, concrete and brick, rock foundation, on campus. About $1,000,000.

Mo., Springfield — Hotel — J. Landers, Landers Bldg., having plans prepared by Heckenlively & Mark, archts., Landers Bldg., for 8 story, 100 x 130 ft., rein.-con. and brick addition, rein.-con. flooring, brick and concrete foundation. About $90,000.

Tex., Cameron—High School—Bd. Educ. plans to build 2 story. About $100,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts. This item incorrectly noted in our issue of June 12.

Tex., Halletsville—School—School Bd. soon lets contract building 1 story school. About $65,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts. Noted June 5.

Tex., Houston—School—City plans to build high school. About $120,000 available.

Tex., Houston—School—City voted $600,000 bonds to build schools.

Tex., Houston—High School—Bd. Educ. having plans prepared by Sanguinet Staats & Gottlieb, archts., 618 Carter Bldg., for Central High School, on site of recently demolished school. About $500,000.

Tex., Victoria—Bank—Levy Bank & Trust Co. plans to build 2 story. About $70,000. C. H. Page & Bro., Austin Natl. Bank Bldg., Austin, archts.

Okla., Oklahoma—Bank—Hawk & Parr, archts., 501 Security Bldg., receives bids in 30-60 days, building 10 story, 60 x 90 ft. steel bank, rein.-con. flooring, on Main and Broad Sts., for Tradesmen's State Bank, 105 West Main St. About $300,000.

Okla., Tulsa—Club—S. G. Kennedy, 1029 Kennedy Bldg., having plans prepared by A. J. Black & Son., archts. and engrs., Tulsa, for 2 story, brick. About $75,000.

Utah, Ogden — Temple — Ogden Labor Temple Assn., Inc., plans to build temple. About $150,000.

Wash., Raymond — Theatre — E. W. Houghton, archt., 630 Lumber Exch. Bldg., Seattle, preparing plans for 50 x 145 ft., pressed brick, tile and terra cotta. About $60,000. Owner's name withheld.

Wash., Walla Walla—Store—A. M. Jensen Co., 2nd and Alder Sts., having plans prepared by H. B. Pearce, archt., Arcade Bldg., Seattle, and Beezer Bros., archts., Seaboard Bldg., Seattle, for 120 x 165 ft., probably brick or cement, concrete foundation, on East Main St. About $125,000. Noted May 15.

Ore., Eugene—Gymnasium, etc.—State having plans prepared by Lawrence & Holford, archts., Chamber of Commerce Bldg., Portland, for 3 story, 86 x 276 ft. gymnasium and club building for women, on University Campus, here. About $200,000. P. Campbell, pres. bd. regents.

Ore., Marshfield—Lodge — B. P. O. E. having plans prepared by Houghtaling & Dougan, archts., Henry Bldg., Portland, for lodge hall and home here. About $50,000.

Ore., Pendleton—Church—Presbyterian congregation plans to build 2 story fireproof church with balcony, auditorium (250 seating capacity), gymnasium, club house, kitchens, etc. About $100,000 available. Address J. F. Morgan, Presbyterian Manse, Alta St., pastor.

Ore., Portland—Church—First Christian congregation, Park and Columbia Sts., plans to build 4 story church on present lot. Cost between $75,000 and $100,000. H. H. Griffis, pastor.

Ore., Portland—Offices, etc.—Mitchell, Lewis & Staver Co., 346 East Morrison St., plans to build 3 story, 100 x 130 ft. automobile business house to include offices, sales rooms, service department, second hand department, shop, stock rooms, etc., on Bway. and Everett St. A. L. Smith, sales mgr.

PAVING—DILLON, MONT.

Bids were received by city for paving in Improvement District No. 5, from (A) Clifton, Applegate & Toole, Anaconda; (B) G. H. Nash, Missoula; (C) Robert Metcalfe, Butte. The unit bids were as follows:

	A	B	C
Removing old crosswalk (lump sum)	$500.00	$1,000.00	$1,500.00
2,272 cu.yd. excavation	1.25	1.25	1.50
10,000 lin.ft. 4-in. drain tile	19	.40	35
550 cu.yd. gravel or rock	2.50	2.25	3.00
12 monument cases	15.00	10.00	15.00
2,472 lin.ft. curb	80	.90	90
6 catch basins	75.00	75.00	55.00
1,896 lin.ft. 8-in. sewer pipe connections	50	.70	.75
26,458 sq.yd. reinforced concrete pavement, 6-in. sides, 8-in. center, 1:1½:3 mix	2.63	2.70	2.80
26,458 sq.yd. asphaltic concrete on concrete base, 5-in. of 1:2:4 mix for base; 2-in. Topeka top	2.58	2.15	....
26,458 sq.yd. bitulithic 5-in. concrete base; 2-in. bitulithic top	....	2.50	....
26,458 sq.yd. asphaltic concrete on bituminous base, 3-in. asphaltic base, 2-in. Topeka top	2.40	....	....
Extended totals reinforced concrete pavement	$86,005	$90,886	$95,797
Extended totals asphaltic concrete pavement	$84,682	$76,334	....
Extended totals bitulithic pavement	....	$85,595	....
Extended totals asphaltic concrete pavement on bituminous base	$79,920	....	....

SEWER—STRATFORD, CONN.

Bids were received by city, June 9, for constructing sewerage system in portion of Central Dist. from (A) N. Mangine, 17 Cliff Ave., Yonkers, N. Y.; (B) Ambrosio & Delbalso, 1737 Main St., Bridgeport; (C) Forgione & Romano Co., 811 Fidelity Bldg., Portland, Me.; (D) Ralph E. Relly, 1821 Ferry St., Easton, Pa., $100,249; (E) Fenlack Constr. Co., 2363 Lyon Ave., New York City, $106,972; (F) N. C. Cosciano & Co., 60 Temple St., Hartford, $108,590; (G) Pierce Mfg. Co., 785 Housatonic Ave., Bridgeport, $114,110; (H) C. Ippolito, 253 Main St., Orange, N. J., $166,679. The unit bids of the lowest 3 bidders were as follows:

		A	B	C
7,952 ft. 8-in. vitrified tile pipe,	0–6	$1.35	$1.19	$1.00
19,487 ft. 8-in. vitrified tile pipe,	6–8	1.40	1.40	1.24
2,485 ft. 8-in. vitrified tile pipe,	8–10	1.70	2.00	1.85
602 ft. 8-in. vitrified tile pipe,	10–12	2.00	2.25	3.47
2,412 ft. 10-in. vitrified tile pipe,	6–8	1.60	2.00	1.59
401 ft. 12-in. vitrified tile pipe,	0–6	1.50	1.35	1.64
595 ft. 12-in. vitrified tile pipe,	6–8	1.70	1.50	1.98
815 ft. 12-in. vitrified tile pipe,	8–10	1.95	2.00	2.37
130 ft. 12-in. vitrified tile pipe,	10–12	2.40	2.50	3.00
1,024 ft. 15-in. vitrified tile pipe,	8–10	2.95	3.75	2.55
1,052 ft. 15-in. vitrified tile pipe,	10–12	3.55	4.50	4.70
274 ft. 15-in. vitrified tile pipe,	12–14	4.05	5.50	5.90
515 ft. 24-in. vitrified tile pipe,	0–6	3.50	5.00	3.90
305 ft. 24-in. vitrified tile pipe,	6–8	3.90	6.00	4.20
605 ft. 24-in. vitrified tile pipe,	8–10	4.80	7.50	4.75
665 ft. 24-in. vitrified tile pipe,	10–12	5.90	8.50	6.60
400 ft. 24-in. vitrified tile pipe,	12–14	6.80	8.50	7.49
149 ft. manholes, 0–8 ft		95.00	100.00	114.00
45 ft. manholes, extension depth 8 ft		5.00	12.00	11.00
1,000 ft. 5-in. deep house connections		.25	.50	1.00
6 tons cast iron pipe		90.00	50.00	100.00
10,000 ft.b.m. sheeting		80.00	50.00	70.00
20,000 ft.b.m. foundation		80.00	50.00	90.00
50 yd. 1-3-5 concrete		12.00	12.00	15.00
50 yd. 1-2-4 concrete		15.00	12.00	17.00
Rock		4.00	4.00	9.00
Extended totals		$90,144	$97,903	$99,604

Cal., Berkeley—School—Bd. Educ. soon receives bids building 9 room addition to Claremont School, frame and stucco, concrete foundation. About $50,000. J. W. Plachek, 2014 Shattuck Ave., archt.

Cal., Berkeley—Schools—Bd. Educ. having plans prepared by J. W. Plachek, archt., 2014 Shattuck Ave., for additions to John Muir and Francis Willard Schools, cost, $51,350 and $42,500 respectively.

Cal., Fresno—Schools — City voted $1,120,000 bonds to build high schools and $880,000 bonds for intermediate schools. Architect not selected. Noted June 5.

Cal., Los Angeles—Recreation, etc.—Bd. Supervs. Los Angeles Co. having plans prepared for 2 story recreation building at County Hospital on Mission Rd., to contain plunge, 30 x 60 ft. gymnasium, assembly hall and six 2 story cottages, also 2 cottages and 6 room residence at Sylmar Sanitarium near San Fernando. About $110,000. A. M. McPherrin, clk.

Cal., Redlands—Hall, Dormitory and Library—Redlands University having plans prepared by N. F. Marsh, archt., 210 Bway. Central Bldg., Los Angeles, for science hall, men's dormitory and library. About $150,000. Noted June 19.

Cal., San Francisco—Loft and Store—Livingston & Co., c/o G. A. Lansburgh, archt., Gunst Bldg., having plans prepared for 6 story, 50 x 120 ft., rein.-con., rein.-con. flooring, concrete foundation, on Geary St. and Union Sq. Ave. About $150,000.

Cal., Santa Barbara—Clubhouse—B. P. O. E. Lodge plans to build clubhouse. About $150,000. H. J. Doulton, member of com. Architect not selected.

Cal., Tracy—Jail—See "Miscellaneous."

Cal., Tulare—Auditorium—City having plans prepared by Perry & Sturgeon, archts., San Francisco, for auditorium. Bonds for $60,000 voted for project. F. M. Eldridge, city clk. Noted May 8.

N. B., Moncton—Temple—Knights of Pythias purchased site on Seymour St. and plans to build. About $80,000.

Que., Hull—School—City plans to build Technical School. About $100,000.

Que., Lotbiniere—Fair Buildings—Lotbiniere Exposition Co. soon receives bids constructing fair buildings. About $100,000. L. Auger, St. John St., Quebec, archt.

Que., Montreal—Court House—Provincial Government, Quebec, plans to build 5 story, 100 x 150 ft. rein.-con. and brick, concrete foundation, on Notre Dame St., E., here. About $600,000. Dept. Pub. Wks., Quebec, engrs.

Que., Verdun—Y. M. C. A., 127 Drummond St., Montreal, plans to construct building on Williston St., here. About $75,000.

Ont., Barrie—School—Edwards & Edwards, archts., 18 Toronto St., Toronto, soon lets contract building 2 story, brick, for School Bd. About $55,000. F. Marr, secy.

Ont., Campbellford—School—Bd. Educ. having plans prepared building concrete, steel and brick. About $69,000.

Buildings (Continued)

Ont., Ottawa — Hall — Loyal Orange County Lodge C-97 plans to build 3 story, 65 x 85 ft., on Gloucester St. About $55,000. Address L. E. Stanley, Rideau St.

Ont., Ottawa—School—School Bd. plans to build on Clarendon Ave. About $75,000. W. C. Beattie, Elgin St., building supt.

Ont., Owen Sound—Collegiate Institute—Dept. Educ., Parliament Bldg., Toronto, plans to build 3 story, brick, here. About $125,000. E. R. Heakes, Parliament Bldg., Toronto, archt.

Ont., Pembroke—Exchange—Bell Telephone Co., 118 Notre Dame St., W., Montreal, Que., having plans prepared by W. J. Carmichael, archt., 29 Hospital St., Montreal, building here. About $75,000.

Ont., Renfrew—Civic Center—City Council plans to build civic center to include memorial hall, city hall, Carnegie Library, fire station, band stand and memorial monument. About $100,000. Millson & Burgess, Booth Bldg., Sparks St., Ottawa, archts.

Ont., Sandwich—School—Separate School Bd. plans to build brick and steel. About $50,000. G. Jaques, 5 Medbury Bldg., archt.

Ont., Saulte Ste. Marie—School—Bd. Educ. soon lets contract building 8 room addition to school. About $55,000. C. A. Findlay, 527 Queen St., archt. Noted May 1.

Ont., Toronto—Bank—Dominion Bank of Canada, Dominion Bank Bldg., purchased site on Bay and Queen Sts. and plans to build 2 story, brick and stone. About $150,000. J. M. Lyle, 19 Avondale Rd., archt.

Ont., Toronto—Theatre—Eastern Theatres, Ltd., Adelaide St., having plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City, building 2 story, steel, brick and stone, brick foundation, on Victoria St. About $600,000.

Man., Dufferin—Memorial Hall—Municipal Council soon lets contract building brick and steel, concrete foundation. About $60,000. Pratty-Ross, 710 Electric Bldg., Winnipeg, archts.

Man., Winnipeg — Service Building — Dept. Pub. Wks., Ottawa, soon lets contract for stone, brick and steel addition to service building at Military Hospital, here. About $100,000.

BIDS DESIRED

N. Y., Brooklyn—Theatre—Until July 7, by T. W. Short, archt., 370 Macon St., building 2 story, 100 x 140 ft., brick, stone and steel, brick foundation, on St. Johns Pl. and Utica Ave., for I. Miller, 166 Union St. About $150,000. Noted June 12.

N. Y., Malone—Armory—Until July 17, by E. S. Walsh, supt. pub. wks., Capitol, Albany, building 50 x 75 ft., brick addition, concrete foundation, here. About $50,000.

N. Y., Port Jervis—School—Until July 10, by Tooker & Marsh, archts., 101 Park Ave., New York City, building 4 story, brick and steel, brick foundation, for Bd. Educ., here. About $85,000.

N. J., Glassboro—High School—Until June 30, by C. S. Adams, archt., 1509 Arch St., Phila., building 2 story, 73 x 142 ft., concrete and stone, on Academy St., here, for Bd. Educ. About $80,000.

N. J., Lakewood—Hotel—Until July 1, by Zipkes, Wolff & Kudroff, archts., 24 West 42nd St., New York City, building 3 story, 50 x 110 ft., rein.-con. and brick, concrete foundation, on 5th and Lexington Aves. About $100,000.

Pa., Coatesville — Hotel, Theatre and Stores—Until June 30, by Stuckert Co., archts., 1420 Chestnut St., Phila., building 2 and 3 story, 150 x 200 ft., brick, steel and rein.-con., on 1st Ave. and Main St., for W. F. B. Boogar. About $150,000.

Pa., Phila.—Bank—Until June 30, by P. A. Davis, archt., 1713 Sansom St., building 2 story, 80 x 110 ft. brick, at 1645 North Broad St., for 10th Natl. Bank. Noted Apr. 10.

N. C., Gastonia—Church—Until Aug. 1, by J. S. Separk, chn., Main St. Methodist Church, building 1 story, 175 x 200 ft., brick and stone, brick foundation, on Main St. C. C. Wilson, 804 Palmetto Bldg., Columbia, S. C., archt.

N. C., Sanatorium—Hospital—Until July 10, by State Bldg. Com., Raleigh, building rein.-con. hospital here. L. R. Woodhull, Raleigh, engr.

N. C., Wilson—Business—Until July 1, by A. Benton, archt., Wilson, building 3 story, 120 x 120 ft., brick, on Barnes and Lodge Sts., for Bern & Harrell Co., Wilson. About $50,000.

S. C., Hartsville—High School—Until July 1, by J. W. Goodson, chn. school bd., building 2 story, 100 x 150 ft., brick and timber. About $95,000. C. C. Wilson, 804 Palmetto Bldg., Columbia, archt. Noted June 5.

Fla., Palatka—School—Until July 8, by city and comrs. Putnam Co., building school. About $50,000. Mark & Sheftall, 210 Clark Bldg., Jacksonville, archts.

O., Lorain—School—Until July 23, by Bd. Educ., building school. Perkins, Fellows and Hamilton, 814 Tower Court, Chicago, Ill., archts.; advertised in this issue.

Mich., Pontiac—Office—See "Industrial Works"

Ill., Chicago—Church—J. E. O. Pridmore, archt., 38 South Dearborn St., receiving bids for 60 x 145 ft. steel addition, at 5749 Kenmore Ave., for Episcopal Church of Atonement. About $50,000.

Minn., Austin—High School—Until July 30, by Bd. Educ., building 3 story, 180 x 220 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation. About $450,000. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt. Noted May 22.

Minn., Bemidji—School—D. F. Mullen, c/o State Bd. Control, St. Paul, and C. H. Johnston, archt. and engr., 715 Capital Bank Bldg., St. Paul, receiving bids for normal school, 2 story, 42 x 120 x 120 ft., rein.-con. and brick, brick foundation. About $100,000.

Minn., Brainerd—Courthouse—Until July 15, by Comrs. Crow Wing Co., building 3 story, 90 x 125 ft., rein.-con. and stone. About $275,000. Alden & Harris, 1011 New York Life Bldg., St. Paul, archt. and engrs. Noted Apr. 3.

Minn., Duluth—Sales—See "Industrial Works."

Minn., Duluth—School—Until July 9, by C. A. Bronson, clk. bd. educ., building 3 story, 80 x 100 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, on 7th St. and 5th Ave., E. About $95,000. Croft & Boerner, Lonsdale Bldg., archts. and engrs. Noted Jan. 23.

Minn., Minneapolis—School—Until July 2, by Bd. Educ., building 2 story rein.-con. addition to George Bancroft School on 14th Ave., S., and 38th St. About $90,000. E. H. Enger, 305 City Hall, archt.

Minn., St. Paul—Hospital—St. Andrew's Hospital receiving bids for 5 story, 42 x 124 ft., rein.-con. and brick, on 7th Ave. S. E. and 5th St. About $75,000. Beuchner & Orth, 500 Shubert Bldg., archts.

Minn., St. Paul—Hospital—Northern Pacific Beneficial Assn., 203 R. R. Bldg., receiving bids for 3 story, 80 x 280 ft., brick and stone, on Snelling Ave. About $500,000. L. Bassindale, 321 Capital Bank Bldg., archt. Noted Mar. 27.

Minn., Winona—Dormitory—Until July 1, by State Bd. Control, Capitol, St. Paul, building 3 story, 46 x 130 ft., rein.-con. and brick, at State Asylum here. About $100,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt. Noted June 12.

Kan., Marysville — Bank — First Natl. Bank receiving bids building 2 story, 43 x 72 ft., brick, rein.-con. flooring, concrete foundation. About $50,000. R. E. Pedan, 945 New York Life Bldg., Kansas City, Mo., archt.

Kan., Wellington — Auditorium — Until July 8, by city, building 2 story, 120 x 190 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation. C. Boller & Bro., Kansas City, Mo., archts. Noted Mar. 13.

S. D., Gilbert—Bank—First Natl. Bank receiving bids for 1 story, 30 x 70 ft. brick and stone. About $50,000. A. Moorman & Co., 501 Minnesota Bldg., St. Paul, Minn., archts.

Wyo., Greybull—School—Until July 15, by School Dist. No. 41, Big Horn Co., building 2 story, grade and high school. About $75,000. W. J. Rogers, clk. W. [illegible] Dedrick, 308 Securities Bldg., Billings, Mont., archt.

Tex., George West—Court House and Jail—Until July 2, by Comrs. Live Oak Co., (Oakville), building 3 story, 75 x [illegible] ft. About $140,000. A. Giles Co., "F[illegible]" Bldg., San Antonio, archts.

Cal., Merced—High School—Until July 11, by Trustees High School Dist., building high school to include 1 and 2 story administration building, 1 story domestic science building, 1 story manual arts and commerce building, 1 story gymnasium and power house. Alternate bids will be received on hollow tile and brick, concrete foundation. About $130,000. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts. Noted Feb. 27.

Que., Three Rivers—Theatre—Until July 9, by C. Lafand, archt., Three Rivers, building 50 x 100 ft. concrete theatre, concrete foundation on Notre Dame St. for T. Trow, Port Henry, N. Y. About $50,000.

Ont., Kingston—Nurses Home—Until July 2, by R. C. Desruchers, Secy. Bd. Pub. Wks., Ottawa, building 4 story, 75 x 80 ft. rein.-con., steel and brick, concrete foundation, on Syndenham St., for Dept. of Militia. About $150,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Easthampton** — Houses — West Boylston Mfg. Co., Hampton Mills, let contract building 2 story timber houses, to F. T. Ley Co., 185 Devonshire St., Boston. About $400,000. Noted June 5.

★**Mass., Greenfield**—Schools—Bd. Educ. let contract building 1 story school in Nash Mills Dist. and 1 story school on Montague City Rd., both brick, rein.-con. flooring, concrete foundation, to P. M. Tuomey Co., 20 Woodleigh Ave. About $65,000. Noted April 17.

★**Mass., Newton (Boston P. O.)**—School—Trustees Fessenden School let contract building 3 story, 48 x 124 ft. rein.-con., concrete foundation, to Aetna Constr. Co., Boston. About $100,000.

★**Mass., Springfield**—School—Bd. Educ. let contract building 1 story brick, concrete and steel addition to Chestnut St. School, rein.-con. flooring, concrete foundation, to L. S. Wood, 14 Stockbridge St. Cost, excluding heat and plumbing, $125,000. Noted April 10.

★**Mass., Springfield**—Theatre—H. Goodsire, pres., Capitol Theatre Co., Fidelity Bldg., Portland, Me., let contract building 5 story, 60 x 154 ft. brick, concrete and steel, rein.-con. flooring, concrete foundation, on Main and Pynchon Sts., to F. T. Ley & Co., Inc., 499 Main St. About $200,000. Noted May 1.

★**Mass., Webster**—School—Town let contract building school, to H. H. Bail, Southbridge. About $62,000.

★**Conn., New Haven**—Business—P. J. Kelly & Co., 74 Orange St., let contract building 4 story brick and steel addition, to F. A. Dusinberre, Port Washington, N. Y. About $60,000. Noted May 29.

★**Conn., Stratford** (Bridgeport P. O.)—Business—H. C. Lovell, 2419 Main St., let contract building 3 story, 100 x 104 ft. brick and concrete, rein.-con. flooring, concrete foundation, on Main St., to T. J. Pardy Constr. Co., 15 Fairfield Ave., Bridgeport. About $120,000. Noted May 29.

★**N. Y., Brooklyn**—Office, etc.—Gibbons Co., 316 Columbia St., will build 5 story, 125 x 175 ft., rein.-con. and steel office and storage building, rein.-con. flooring, concrete foundation, on Columbia St. and Hamilton Ave. About $250,000. Work will be done by day labor.

★**N. Y., Brooklyn**—School—St. Cyryl & Methodius congregation let contract building 2 story, 68 x 100 ft. brick, stone and steel, brick foundation, on Du Pont St., between Franklin and Manhattan Aves., to Miller-Reed, 103 Park Ave., New York City. About $90,000. Noted Jan. 23.

★**N. Y., Brooklyn** — Theatre — A. H. Schwartz, 815 Flatbush Ave., will build 1 and 2 story, 80 x 180 ft., brick, stone and steel, brick foundation, on Flatbush Ave. and Farragut Rd. About $60,000. Work will be done by day labor. Noted Apr. 24.

Buildings (Continued)

★N. Y., Buffalo—Office—Amer. Radiator Co., Elmwood Ave., will build 2 story, 45 x 65 ft. brick and rein.-con., rein.-con. flooring, concrete foundation. About $50,000. Work will be done by day labor.

★N. Y., Central Islip — Hospital—State Hospital Comn., Albany, let general contract building 3 story, 39 x 296 ft. addition, with 3 wings, 35 x 39 ft. brick and rein.-con., concrete foundaton, to Central Islip Hospital, here, to W. L. Crow Constr. Co., 103 Park Ave., New York City, $289,900; sanitary work to Jarcho Bros., 22 East 105th St., New York City, $24,000; heating, to W. B. Armstrong Co., 3 Fulton St., Albany, $22,842. Noted June 12.

★N. Y., Endicott—Church—Methodist Episcopal congregation let general contract building 77 x 151 ft. brick, concrete foundation, on Monroe St. and McKinley Ave., to Mitchell & Co., Binghamton. About $88,600.

★N. Y., Little Valley—Hall—Cattaraugus Co. let contract building 3 story, 40 x 70 ft. brick, steel and concrete addition to hall of records, rein.-con. flooring, concrete foundation, to Warren Constr. Co., Gokey Bldg., Jamestown. About $60,000.

★N. Y., New York—Mercantile—G. Backer Constr. Co., 11 East 55th St., will build 11 story, 50 x 100 ft., brick and steel, brick foundation, at 16-18 West 36th St. About $225,000. Work will be done by day labor.

★N. Y., New York—Theatre—B. S. Moss, 729 7th Ave., let contract building 2 story, 125 x 150 ft., brick and steel, brick foundation, on 161st St. and Prospect Ave., (Bronx Boro.) to Fleischman Constr. Co., 531 7th Ave. About $600,000.

N. J., Jersey City—School—Bd. Educ. received lowest bid building School No. 23, from M. Connelly, 238 17th St., $719,000. Noted June 12.

★Pa., Drexel Hill—Church—Church of Incarnation let contract building 2 story, 42 x 82 ft. stone, to Bowden Constr. Co., 1713 Sansom St., Phila.

★Pa., Phila.—Sales and Service—J. J. Greenberg, Morris Bldg., let contract building 2 story, 137 x 225 ft., concrete and brick, on Broad and Master Sts., to Wark Co., 1737 Filbert St.

★Pa., Phila.—Store—S. S. Kresge Co., 931-937 Market St., let contract for altering and building 3 story, 60 x 190 ft. addition, to G. A. Fuller Co., Widener Bldg. About $100,000.

★Pa., Pittsburgh—Church—St. Andrews congregation, East Liberty St., let contract building, 2 story, to E. Wehr, Highland Bldg.

★Pa., Tamaqua—Bank—First Natl. Bank let contract building 1 story, 50 x 63 ft., brick and concrete, concrete foundation, to A. Breslin, Summit Hill.

★Md., Mt. Washington (Baltimore P. O.) — School and Dormitories — Sisters of Mercy, Mt. St. Agnes College, let contract building 3 story, 46 x 104 ft., rein.-con., steel and brick, brick and concrete foundation, to Frainie Bros. & Haigley, 18 Clay St., Baltimore. About $50,000 ommission basis.

★N. C., High Point—Theatre—O. E. Kearns let contract building 2 story, 40 x 100 ft. brick, to J. O. Cannon, High Point. About $50,000.

★S. C., Charleston—School—School Bd. let general contract building 2 story, 100 x 170 ft., on King St., to McDavitt Fleming Co., Chattanooga, Tenn., $93,200. Noted May 1.

★S. C., Hartsville—High School—School Bd. let contract building 2 story, 100 x 150 ft., timber, to J. W. Stout & Co., Sanford, N. C. About $64,000. Noted June 5.

★Ala., Bessemer—Court House and Jail —Bd. Revenues Jefferson Co. let contract building 3 story, 100 x 140 ft., on 18th St. and 3rd Ave., to Smallman, Brice Constr. Co., Amer. Trust Bldg., Birmingham. About $117,600. Noted May 15.

★O., Cleveland—Theatre—S. Somerfield, 6114 Echott Ave., will build 1 story, 66 x 108 ft., concrete, steel and brick, on West 32nd St. and Bridge Ave. About $50,000. Work will be done by day labor.

★O., Troy—Sales—Troy Automobile Co., Market St., let contract building 2 story, 60 x 170 ft., rein.-con. sales building and garage, rein.-con. flooring, concrete foundation, to Concrete Steel Constr. Co., 415 Mitchell Bldg., Springfield. About $50,000.

★Mich., Detroit—Office—See "Industrial Works."

Mich., Detroit—Schools—Bd. Educ., 50 Bway., received bids building (a) Longfellow School, (b) Roosevelt School, (c) Standard School; (1) masonry, (2) carpentry, (3) heating and ventilating, from F. H. Goddard, 516 Franklin Ave., (a1) $59,000, (b1) $138,500, (c1) $188,000; Culbertson & Kelley, 814 Ford Bldg., (a1) $64,880, (b1) $157,870, (c1) $207,186; M. A. Mahoney, Penobscot Bldg., (a1) $65,499; Lennane Bros., 809 Union Trust Bldg., (b1) $138,407; M. Bartholomaei, 466 Warren Ave., E., (c1) $225,000; E. Thiede, 287 Berlin St., (a2) $22,755, (b2) $32,961, (c2) $48,742; Harcus & Co., 774 Russell St., (a2) $25,849, (b2) $41,635, (c2) $58,204; H. M. Martens Co., 221 Moffat Bldg., (a2) $26,700, (b2) $33,300, (c2) $50,714; J. H. Partlan, 51 Park Pl., (a3) $43,744, (b3) $61,008, (c3) $90,129; R. L. Spitzley Constr. Co., 396 Mt. Clair Ave., (a3) $44,744. Noted May 22.

★Ill., Buda—Schools—Bd. Educ. let contract building 2 story, 89 x 90 ft., high school, and 2 story, 36 x 92 ft., grade school, with 28 x 36 ft. wing, to replace school in Dist. 137, to T. D. Hobson & Son, Harvey. About $100,000.

★Ill., Chicago—Bank—Standard Trust & Savings Bank, 102 South Clark St., let contract altering 3 story, 47 x 90 ft., at 110 South Clark St., to A. Brundage, 110 South Dearborn St. About $50,000.

★Wis., Jefferson — Sanitarium — Bd. Supervs., Jefferson Co., let contract building 1 and 2 story, 50 x 100 ft., rein.-con. and brick, rein.-con. flooring, concrete foundation, to Hansen Constr. Co., 425 East Water St., Milwaukee, $89,956. Noted June 5.

★Wis., Milwaukee—Store—Gimbel Bros., Grand Ave. and West Water St., let contract building 6 story, 75 x 130 ft. rein.-con. and brick, rein.-con. flooring, concrete foundation, on Sycamore and West Water Sts., to P. Riesen & Sons, 1018 Humboldt Ave. About $250,000. Noted June 5.

★Minn., Minneapolis — Exchange and Office—Northwestern Telephone Exch. Co., 224 South 5th St., let contract building 11 story, 132 x 157 ft., on 3rd Ave., S., and 5th St., to Lanquist & Illsley Co., 1100 North Clark St., Chicago. About $1,000,000. Noted Apr. 3.

★Minn., Minneapolis — Office—Chamber of Commerce let contract building 35 x 50 x 75 ft., rein.-con. and brick addition to school on 3rd St. and 4th Ave., S., to O. V. Haglin, 226 Library Exch. About $52,000.

★Minn., Wilmar—Cottages — State Bd. Control, Capitol, St. Paul, let general contract building 2 story, 45 x 120 ft., rein.-con. and brick, at State Asylum, here, to J. Peterson, 3152 10th Ave., S., Minneapolis, $116,500. Noted June 12.

★Kan., Sabetha—Memorial Hall—City let contract building 2 story, 75 x 130 ft., rein.-con., stone and brick, rein.-con. flooring, to Petterson Constr. Co., Salina, $55,500. Noted June 12.

★Neb., Omaha—Store—E. L. Means, Orleans, let contract building 6 story, 120 x 132 ft., brick and rein.-con., concrete foundation, rein.-con. flooring, on 11th and Dodge Sts., to J. L. Carnegie & Sons Co., 189 West Madison St., Chicago. About $160,000. Noted May 29.

★N. D., Pembina—High School—Bd. Educ. let contract building high school, to B. F. Marshke, Pembina. About $80,000. Noted May 15.

★Mo., St. Louis—Mercantile—Allen Estate, 903 La Salle Bldg., let contract building 3 story, 40 x 70 ft. rein.-con., steel and brick addition, rein.-con. flooring, at 300-304 North 4th St., to Pelligreen Constr. Co., 1500 South Grand Ave. About $50,000.

★Tex., Hearne—High School—City let contract building 2 story, 74 x 116 ft. brick, rein.-con. and steel, concrete foundation, to Fischer & Lambie, 108 West 5th St., Austin. About $50,000.

★Okla., Pawhuska—High School—Bd. Educ. let contract building 2 story, 150 x 150 ft. brick, rein.-con. flooring and concrete foundation, to Bradley Constr. Co., Pawhuska; $104,051. Noted Mar. 6.

★Ariz., Gilbert—School—School Trustees let contract building 2 story, 7 room, including auditorium, brick and hollow tile, concrete foundation, to J. W. Tucker, Phoenix, $64,400. Noted May 1.

★Ore., Corvallis—Laboratory—State Agricultural College let contract building 2 story, 56 x 220 ft. brick and concrete, concrete foundation, on college campus, to Snook & Travers, Albany, $69,987. Noted June 19.

★Cal., Anaheim—Church—First Methodist Episcopal congregation let contract building 2 story, 80 x 120 ft., frame and stucco, concrete foundation, to Daniels & Farris, 918 Herkimer St., Pasadena, $54,250. Noted Apr. 3.

★Cal., Los Angeles — Hotel — Wilshire Blvd. Hotel Co. let contract building 5 story, rein.-con. and brick, on Wilshire Blvd., 8th, Fedora and Catalina Sts., main building to be "H" shaped, with wings 500 ft. long, to Weymouth Crowell, 902 South Alvarado St., $709,950. California Hotel Corp., Maryland Hotel, Pasadena, lessee. Noted May 22.

★Que., Montreal—Y. W. C. A., Dorchester St., let contract constructing 5 story, stone, steel and concrete building, to include 20 x 60 ft. swimming pool, 48 x 64 ft. gymnasium, roof garden, cafeteria, etc., to E. G. M. Cape Co., New Birks Bldg. About $300,000. Noted Mar. 13.

Federal Government Work

PROPOSED WORK

Pa., Phila.—Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to complete erection of portable steel building, here; Spec. 3987. About $17,182.

Del., Wilmington—Dredging—U. S. Engr. Office, Old Federal Bldg., rejected bids dredging between Rehoboth Bay and Delaware Bay. Noted May 15.

Md., Annapolis — Garage—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3988. About $30,000.

Va., Quantico—Road and Floor—Bureau Yards & Docks, Navy Dept., Wash., D. C. plans to build concrete road and floor for hangar, here; Spec. 3980. About $44,000.

S. C., Paris Island—Lining Drydock—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to line drydock with concrete; Spec. 3979. About $25,000.

Fla., St. Augustine—Shore Protection—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build here; Spec. 3973. About $1000.

Ky., Louisville—Lock and Abutment—U. S. Engr. Office, Louisville, received no bids building lock and abutment for Dam No. 45, Ohio River, at Addison, Ky. Noted June 5.

Tex., El Paso—Warehouse—U. S. Constr. Quartermaster plans to build warehouse to cover 500,000 sq.ft. floor space. About $1,000,000.

Tex., San Antonio—Hangars—U. S. Constr. Quartermaster soon receives bids building twelve 1 story, 66 x 200 ft. hangars.

Tex., San Antonio—Storage Building—U. S. Constr. Quartermaster, San Antonio, soon receive bids building 1 story, 136 x 240 ft. storage building. About $140,000.

BIDS DESIRED

Mass., Boston—Cranes — Until July 2 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes in addition to structural shop, here; Spec. 3946. About $65,000; $10 deposit required for plans and spec. Noted June 19.

Mass., Hingham—Officers' Quarters—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building 2 officers' quarters, here; Spec. 3804. About $24,000; $10 deposit required for plans and spec. Noted Feb. 13.

N. Y., Brooklyn—Cranes—Until July 2 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing electric traveling cranes in Navy Yard, here; Spec. 3933. About $200,000; $10 deposit required for plans and spec. Noted June 5.

Federal Government Work (Continued)

N. Y., New York—Dredging—Until July 21, by U. S. Engr. Office, 39 Whitehall St., dredging in Passaic River, N. J.; advertised in this issue.

N. Y., New York—Removing Wreck—Until July 23, by U. S. Engr. Office, 39 Whitehall St., removing wreck of steamship Port Phillip in main entrance to New York Harbor; advertised in this issue.

N. Y., Rockaway—Extension to Steam Heating System—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., extending steam heating system at Air Sta., here; Spec. 3976. About $20,000; $10 deposit required for plans and spec.

N. Y., Rockaway—Latrine and Washroom—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building at Air Sta., here; Spec. 3975. About $12,000; $10 deposit required for plans and spec.

Pa., Phila.—Dredging—Until July 25, by U. S. Engr. Office, Phila., dredging Schuylkill River; advertised in this issue.

Md., Baltimore—Dredging—Until July 21, by U. S. Engr. Office, Baltimore, dredging in channel to Curtis Bay; advertised in this issue. Noted June 5.

D. C., Bellevue—Crane and Fire Protection System—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C. installing at pier, here; Spec. 3972. About $55,000; $10 deposit required for plans and spec.

D. C., Wash.—Officers' Quarters—Until July 15, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building medical officers' quarters at U. S. Marine Hospital, here.

Va., Hampton Roads—Boat Shed and Dredging—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building boat shed and dredging, here; Spec. 3974. About $60,000; $10 deposit required for plans and spec.

Va., Quantico—Repairs to Flying Field, Road and Floor—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C. repairing flying field, building road and concrete floor for hangar, at Marine Aviation Field, here; Spec. 3980. About $48,000; $10 deposit required for plans and spec.

Va., Yorktown—Machine Shop — Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3978. About $5000; $10 deposit required for plans and spec.

N. C., Wilmington—Officers' Quarters—Until July 15, by J. A. Westmore, superv. archt., treas. dept., Wash., D. C., building medical officers' quarters, here.

S. C., Charleston—Quarters for Guards—Until June 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building here; Spec. 3977. About $50,000; $10 deposit required for plans and spec.

Ga., Savannah—Dredging—Until July 21, by U. S. Engr. Office, Savannah, dredging Savannah Harbor; advertised in this issue.

Fla., Jacksonville—Coal—Until July 24, by U. S. Engr. Office, Jacksonville, furnishing 6000 short tons coal for U. S. dredges on Hillsboro Bay and tributary waters; also 5000 short tons coal for U. S. dredges on St. Johns River and tributary waters; advertised in this issue.

Fla., Jacksonville—Jetty—Until July 24, by U. S. Engr. Office, Jacksonville, building jetty at entrance to St. Johns River; advertised in this issue.

Ala., Andalusia—Post Office—Until July 22, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., building, here.

La., New Orleans—Stone—Until July 15, by U. S. Engr. Office, Customhouse, furnishing and delivering stone for Head of Passes, South Pass and Southwest Pass, Mississippi River; advertised in this issue.

Mich., Sault Ste. Marie—Dredging—Until July 22, by U. S. Engr. Office, Sault Ste. Marie, dredging Grosse Pointe Channel, Lake St. Clair; advertised in this issue.

S. D., Rapid City—School—Until July 16, by C. Sells, comr. Indian Affairs, Wash., D. C., building school, here. Noted Mar. 20.

HIGHWAYS—GILBOA, N. Y.

Bids were received by Board of Water Supply, Municipal Bldg., New York City, June 10, for constructing highways around Schoharie Reservoir, Contr. No. 202 from (A) Schunnemunk Constr. Co., Highland Mills; (B) Beaver Eng. & Contg. Co., 51 Chambers St., New York City, (C) S. Beskin, Beacon; (D) Ward & Tully, Inc., 2047 West 11th St., Brooklyn, $229,225; (E) Langthorn Co., Inc., 2 West 45th St., New York City, $252,950; (F) J. F. Chapman, Hillside, N. J., $259,325; (G) Rosoff Eng. Co., Inc., 2323 Park Row Bldg., New York City, $287,650. The unit bids of the lowest 3 bidders were as follows:

	A	B	C
110,000 cu.yd. earth excavation	$0.80	$0.75	$0.90
2,500 cu.yd. rock excavation	2.50	3.88	3.00
2,000 cu.yd. dry paving	5.00	3.88	2.75
750 cu.yd. grouted paving	7.00	5.13	3.50
500 cu.yd. dry masonry	7.00	5.13	3.50
300 cu.yd. rubble masonry	9.00	6.38	6.00
3,000 cu.yd. concrete masonry	8.00	9.50	14.00
6,500 bbls. portland cement	3.00	3.88	3.00
1,000 sq.ft. flagging	1.00	.75	.18
3,000 lin.ft. 6-in. tile underdrains	.40	1.38	.12
5,000 lb. steel for reinforcing concrete	.10	.20	.15
22,000 lin.ft. guard-rails	.50	.75	.50
800 cu.yd. broken stone and gravel	4.00	3.88	5.00
10M. ft.b.m. timber and lumber	60.00	125.00	70.00
Extended totals	$176,700	$188,751	$196,665

SEWAGE TREATMENT WORKS—PONTIAC, MICH.

Bids were received by city, (lowest 3), June 9, for constructing sewage treatment works from (A) Pitt Constr. Co., Fulton Bldg., Pittsburgh, Pa.; (B) Warner Constr. Co. 189 West Madison St., Chicago, Ill.; (C) Montague-Forwey Co., 813 Ford Bldg., Detroit. The unit bids were as follows:

	A	B	C
2,052 ft. 42-in. sewer	$9.00	$10.92	$24,790.00
6 manholes	130.00	190.00	
Tanks:			
3,200 cu.yd. excavation above 100	1.00	.82	1.00
9,820 cu.yd. excavation below 100	2.50	3.00	5.63
436 cu.yd. Class "A" concrete	28.00	25.82	25.72
2,190 cu.yd. Class "B" concrete	28.00	25.25	22.75
14.3 tons cast iron	150.00	230.00	133.20
2 screens	100.00	65.46	100.00
Valves, etc. (lump sum)	3,700.00	6,000.00	3,925.68
Weirs, plank (lump sum)	300.00	425.00	500.00
Sludge Bed:			
4,360 cu.yd. excavation	1.25	.82	1.00
62 cu.yd. Class "C" concrete	15.00	15.75	21.80
2,530 sq.yd. sand bed	1.00	1.70	1.22
100 concrete posts	1.00	4.50	4.00
2,000 plank	70.00	128.00	111.00
1,300 ft. track	.90	.75	1.00
9 switches	60.00	72.00	75.00
1 dump car	150.00	218.00	211.00
Filters:			
13,800 cu.yd. excavation	1.50	.82	1.50
1,000 cu.yd. Class "A" concrete	21.00	19.39	25.82
8,280 sq.yd. floor	1.20	1.37	1.80
15,620 cu.yd. filter stone	4.25	4.00	4.10
18 tons cast iron	150.00	270.00	116.00
2,000 plank	70.00	76.00	156.50
1 24-in. sluice gate	300.00	475.00	275.00
Installing distributors (lump sum)	800.00	428.00	1,320.00
Underdrains (lump sum)	6,400.00	11,800.00	6,055.00
Secondary Tanks:			
1,730 cu.yd. excavation	3.00	3.00	3.00
320 cu.yd. Class "A" concrete	23.00	19.93	25.82
4 18-in. sluice gates	200.00	220.00	166.50
3 6-in. valves and boxes	30.00	51.00	24.97
2.75 tons cast iron	180.00	235.00	111.00
Inlets and outlets (lump sum)	1,200.00	1,564.00	1,665.00
Pump house (lump sum)	1,200.00	2,462.00	2,220.00
Miscellaneous Items:			
Bridge (lump sum)	2,000.00	2,739.00	2,775.00
1,800 cu.yd. excavation of river	1.00	.82	2.60
530 cu.yd. 6-in. sludge line	2.00	2.41	2.50
1,400 cu.yd. 6-in. water main	2.00	2.51	3.00
6 hydrants	65.00	100.00	100.00
75 ft. 24-in. reinforced concrete pipe	3.00	4.05	5.10
406 ft. 30-in. reinforced concrete pipe	4.00	5.07	6.10
36 ft. 30-in. cast iron pipe	14.00	18.45	17.00
184 ft. 15-in. vitrified pipe	1.00	2.40	1.77
180 ft. 24-in. vitrified pipe	2.00	3.50	3.30
2,350 sq.yd. roadways	.50	.50	.72
0.83 acres seeding	200.00	90.00	900.00
1,560 sq.yd. sodding	.50	.60	.66
130 sq.yd. riprapping	1.00	2.70	2.10
Extended totals	$295,796	$299,992	$338,096

Tex., Galveston—Paving Material—Until July 7, by U. S. Engr. Office, Galveston, furnishing 19,000 cu.yd. freshwater sand, 46,000 bbls. Portland cement, 38,000 cu.yd. broken stone, and 1,070,000 lb reinforcing steel.

Tex., San Antonio — Warehouse — Until July 1, by U. S. Constr. Quartermaster, building warehouse, to cover 1,000,000 sq. ft floor space. About $2,000,000.

Idaho, Sorrento—Cottage—Until July 23, by C. Sells, comr. Indian Affairs, Wash., D. C., building physicians cottage at Coeur d'Alene School, here.

Ariz., Leupp—Bridges—Until July 23, by C. Sells, comr. Indian Affais, building two steel highway bridges, one over Little Colorado River and one over Canyon Diable, near here.

Cal., Mare Island—Cranes—Until July 2 (change of date), by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing 3 electric traveling cranes in structural shop, here; Spec. 3903. About $275,000; $10 deposit required for plans and spec. Noted June 19.

H. T., Honolulu—Dredging—Until Aug. 26, by U. S. Engr. Office, Honolulu, dredging Honolulu Harbor; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Portsmouth — Laundry—Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract building at Marine Barracks, here, to T. A. Cassidy, 54 Boylston St, Fitchburg, Mass., (1) $11,600, (60 days). Noted June 19.

Federal Government Work (Continued)

★Mass., Boston—Repairing Pier Walls—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract repairing walls of Pier 1, to Dewey Cement Gun Constr. Co., 836 Hamilton St., Allentown, Pa., $35,438, items (1), (2), (3) and (4), (90 days). Noted June 12.

★Mass., Chelsea—Heating and Distributing system—Bureau of Yards & Docks, Navy Dept., Wash., D. C., let contract extending heating plant and distriubting system, here, to Power Efficiency Corp., White Bldg., Buffalo, N. Y., $54,886 (75 days). Noted June 19.

★Mass., Hingham — Dredging — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract dredging at Naval Ammunition Depot, here, to Bay State Dredging & Contg. Co., 62 Condor St., East Boston. Noted June 19.

★Mass., Hingham—Fire Protection System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing here, (a) to Pittsburgh-Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $27,190, (140 days); (b) Carleton Mace Eng. Corp., 294 Washington St., Boston, Mass., $87,352, (120 days). Noted June 19.

★R. I., Newport—Marine Railway—Local Navy Yard let contract building marine railway, to W. L. Miller Co., 171 Alford St., Boston, Mass., $49,873, (150 days). Noted May 22.

★N. Y., Brooklyn—Building, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing Building "F" and altering stairway in main hospital, here, to Nugent Constr. Corp., 505 5th Ave., New York City, $250,422 (120 days). Noted June 19.

★N. Y., Brooklyn—Fire Protection Apparatus—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing additional fire protective apparatus, at Medical Supply Depot, here, to G. E. Eng. Co., 22 Laight St., New York City, $5080 (15 days). Noted May 1.

★N. Y., New York—Chimney—Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract building chimney for boiler plant, here, to M. W. Kellogg Co., 90 West St., $12,873, (90 days). Noted June 5.

★N. Y., New York — Dredging—U. S. Engr. Office, 39 Whitehall St., let contract dredging and removing rocks in East River, to N. J. Shipbuilding & Dredging Co., foot of 28th St., Bayonne, N. J., $646,197.

★N. J., Cape May—Roads and Walks—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to H. S. Roberts, 1123 Bway, New York City, $70,792, (150 days). Noted June 5.

★D. C., Anacostia—Earth Fill—Bureau Yards & Docks, Navy Dept., Wash., D. C. let contract building earth fill, here, to Sheer & Deckelbaum, 1359 H St., N. E., Wash., 12,000 (50 days). Noted June 19.

D. C., Wash.—Equipment—First Asst. Postmaster General received bids June 19, furnishing equipment for post office garage, from I. Freund, 1315 7th St., N. W., $10,352, alternate $450; W. K. Moran & Co., Inc., 405 Lexington Ave., New York City, $11,757, alternate $350; Standard Eng. Co., 2129 I St., N. W., $12,490, alternate $520.

D. C., Wash.—Garage—First Asst. Postmaster General received bids June 19, building garage at post office, from A. C. Moses Constr. Co., 918 New York Ave., N. W., $51,649, alternate (a) $2420, alternate (b) $700, alternate (c) $300, alternate (d) $250, alternate (e) $950; Skinker & Garrett, 1416 F St., N. W., $52,506, alternate (a) $2640, alternate (b) $1000, alternate (c) $700, alternate (e) $700; Boyle Robertson Constr. Co., Evans Bldg., $54,780, alternate (a) $1200, alternate (b) $800, alternate (c) $500, alternate (d) $500, alternate (e) $700.

★D. C., Wash.—Laboratory—U. S. Constr. Quartermaster, War College, let contract building 2 story, photographic laboratory, here, to E. Diebitsch, 383 Madison Ave., New York City, $62,359. Noted June 19.

D. C., Wash.—Pavement—Bureau Yards and Docks, Navy Dept., Washington D. C., received only bid June 18, paving with vitr. brick at Marine Barracks, from Costigan & Maloney, 407 Colorado Bldg., $4934. Noted June 5.

D. C., Wash.—Sewers—Dist. Comrs., Dist. Bldg., received bids June 23, constructing Luzon Ave. trunk sewer, (1) excavation per cu. yd.; (2) concrete masonry per cu.yd.; (3) vitr. brick masonry per cu.yd.; (4) sewer brick per cu.yd., from W. F. Cush, 3rd and R Sts., N. E., (1) $2.85, (2) $15.40, (3) $45, (4) $24; W. F. Brenizer, 101 New York Ave., N. E., (1) $2.50, (2) $15.50, (3) $45, (4) $25; G. Hyman, 1116 Morse St., N. E., (1) $3, (2) $17, (3) $40, (4) $30. Noted June 12.

D. C., Wash.—Sewage Disposal Plant—Dist. Comrs., Dist. Bldg., received bids June 23, constructing substructure for Rock Creek Pumping St. of sewage disposal system, here, (1) excavation per cu.yd.; (2) concrete masonry, from W. F. Brenizer Co., 101 New York Ave., N. E., (1) $3.90, (2) $15; Backer & Chapman, 314 Equitable Bldg., Baltimore, Md., (1) $5.47, (2) $20.77. Noted June 5.

Va., Hampton Roads — Bridge—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, building transfer bridge at Operation Base, here, (1) work complete, from
Raymond Concrete Pile Co., 140 Cedar St., New York City, (1) $113,420 (210 days), (2) $ .85, (3) $ .50.
McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., (1) $114,745 (200 days), (2) add $1.25, deduct $ .10, (3) add $ .65, deduct $ .05.
McHarg Barton Co., 171 Madison Ave., New York City, (1) $123,900 (210 days), (2) add $ .75, deduct $ .20, (3) add $ .40, deduct $ .10. Noted June 5.

★Va., Hampton Roads—Buildings, Railroad, Sewer and Water Systems—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract constructing industrial buildings, railroad, sewer and water systems, at Submarine Base, here, to Boyle-Robertson Constr. Co., Evans Bldg., Wash., D. C., $210,290, (210 days). Noted June 5.

★Va., Hampton Roads—Electric Distributing System — Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing at Submarine Base, here, to Hatzel & Buchler, Inc., 373 4th Ave., New York City, (1) $48,813 plus $2750 for furnishing Underground Cable Co. terminal boxes, (120 days). Unit prices on (2), (3) and (4) also accepted. Noted June 19.

Va., Hampton Roads — Pier — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, building merchandise pier, here, (1) work complete, from McLean Contr. Co., Fidelity Bldg., Baltimore, Md., (1) $657,000, (295 days), (2) deduct $120, (3) $45; J. Gill & Sons, 1302 Citizens Bldg., Cleveland, O., (1) $669,000, (300 days), (2) $670, (3) $490; H. P. Converse & Co., 31st St. and Colonial Ave., Norfolk, Va., (1) $679,800, (270 days), (2) $1000, (3) $70; Boyle Robertson Constr. Co., Evans Bldg., Wash., D. C., (1) $629,497, (300 days), (2) $900, (3) $100. Noted June 5.

Va., Newport News—Boilers—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 20, installing in post office and custom house, here, from W. Wilby, Selma, Ala., $1968; C. J. Gleason, Augusta, Ga., $2148; Noland-Clifford Co., 330 28th St., $2365. Noted June 5.

★Va., Norfolk—Dredging—U. S. Engr. Office, Custom House, let contract dredging and widening channel to Newport News, to Sanford & Brooks Co., Commerce and Water Sts., Baltimore, Md., $370,313. Noted April 10.

Va., Quantico — Storehouses — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, metal storehouses, here, (1) work complete, from Austin Co., 1026 Bulletin Bldg., Philadelphia, Pa., (1) $262,000, (2) $245,000, (4) $286,000; Boyle Robertson Const. Co., Evans Bldg., Wash., D. C., (1) $266,600, (60) days), (2) $254,119, (60 days), (4) $289,541, (5) $2.50, (20 days), alternate (1) $272,488, (2) $260,955; Newport Contg. & Eng., Co. Silsby Bldg., Newport News, (1) $274,697 (60 days), (2) $259,147, (60 days), (4) $297,862, (60 days), (5) add $2.92, (30 days). Noted June 12.

★Va., Quantico—Tank and Tower—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building steel water tank and tower at Marine Barracks, here, to Pittsburgh & Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $5580, (75 days). Noted June 19.

★Va., Quantico—Wharf—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., $124,975, (145 days). Noted June 5.

S. C., Charleston — Building — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, constructing amusement building, here, (1) work complete, from D. F. Brandon & Co., 806 James Bldg., Chattanooga, Tenn., (1) $36,774, (120 days), (2) $1847, (3) $1025; H. S. Roberts & Co., 1123 Bway., New York City, (1) $39,644, (180 days), (2) add $1500, (3) deduct $2700; Simons-Mayrant Co., Peoples Office Bldg., (1) $41,497, (120 days), (2) add $900, (3) deduct $1000. Noted June 5.

S. C., Clinton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids June 18, building, here, (materials furnished by Government), from W. J. Brent, 632 Law Bldg., Norfolk, Va., $25,296; Unkefer Constr. Co., Minerva, O., $39,350. Noted May 29.

S. C., Paris Island — Dredge—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids June 18, furnishing 12 in. steam-driven, hydraulic dredge, at Marine Recruiting Sta., here, from Ely Constr. Co., 201 East Henry St., Savannah, Ga., $55,000, (second-hand dredge); Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $73,500 (120 days). Noted June 5.

★S. C., Port Royal—Dredge—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing 12 in. hydraulic dredge, here, to Ellicott Machine Co., Bush and Severn Sts., Baltimore, Md., $73,500, (120 days). Noted June 5.

★Fla., Jacksonville — Dredging — U. S. Engr. Office, Jacksonville, let contract dredging in Miami Harbor (Biscayne Bay), to Bowers Southern Dredging Co., Amer. Natl. Insurance Bldg., Galveston, Tex., $60,000. Noted April. 3.

★S. D., Bellefourche—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., let contract building post office, here, to C. E. Goodham, Chadron, Neb., $54,750, (14 months). Noted June 12.

★Mont., Hamilton—Road Work—Bureau Pub. Rds., Missoula, let contract grading 5.1 mi. East Fork Bitterroot National Forest Rd., to P. O'Connor, Missoula, $16,026. Noted June 5.

★Col., Denver—Boilers—J. A. Wetmore, superv. archt., treas, dept., Wash., D. C., let contract installing 2 boilers in post office, here, to C. J. Gleason, Augusta, Ga., $5675. Noted June 19.

★Idaho, Coeur d'Alene—Road Work—Bureau Pub. Rds., Missoula, Mont., let contract grading 3 mi. Sect. 2, Fourth of July Canyon Rd., Kootenai Co., to De Camp Bros. & Hughes, Chatcolet, $21,500. Noted May 15.

★Cal., San Fransico—Fireproofing—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract fireproofing powerhouse and machine shop here, to Tiburon Cutleben Bros., New Call Bldg., $17,691, (97 days).

★P. I., Cavite—Power Plant Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract installing, here, to C. C. Moore & Co., Sheldon Bldg., San Francisco, Cal., $112,642, (140 days). Noted June 5.

P. R., Cayey—Radio Buildings—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids building addition to operators' quarters and 2 cottages at High Power Radio Sta., here (1) work complete, from Hamilton & Chambers Co., 29 Bway., New York City, (1) $37,400, 180 days); King Lumber Co., Charlotesville, Va., (1) $54,000, (180 days), (2) $24,000; (3) $35,000. Noted May 29.

Miscellaneous

PROPOSED WORK

Electric Light System—Endicott, N. Y.—Village Bd. Trustees soon receive bids installing ornamental electric lighting system on Washington Ave. Cost between $12,000 and $15,000.

Airdrome, etc.—Ogdensburg, N. Y.—Amer. Handley Page Co., Inc., recently incorporated with $5,000,000 capital stock, plans to build airdrome, including repair and machine shops. Cost, including equipment, $100,000. Adress W. H. Workman, 82 Ford St., dir.

Fire Alarm and Telegraph Systems—Rensselaer, N. Y.—R. Greenalch, city engr., soon receives bids altering and extending fire alarm and telegraph systems. Cost between $18,000 and $20,000.

Miscellaneous (Continued)

Coal Pocket—Rochester, N. Y.—A. R. Miller, Jr., 500 West Ave., soon receives bids building rein.-con. circular coal pocket, 50 ft. diameter, 40 ft. high, near Buffalo, Rochester & Pittsburgh R.R. on West Ave. Cost between $12,000 and $15,000.

Pavilion—Syracuse, N. Y.—Supervs. Onondaga Co. voted appropriation of $500 to have plans drawn for children's pavilion at Onondaga Tuberculosis Sanatorium. Cost between $75,000 and $100,000. Address C H. Searl, Syracuse.

Truck, etc. — Syracuse, N. Y. — Bd. Supervs., Onondaga Co., soon receives bids for 1 light truck, $1800, 2 tar kettles, $600 and 1 trailer, $2000.

Swimming Pool—Montclair, N. J.—Bd. Educ. having plans prepared by Starret & Van Vleck, engrs., 8 West 40th St., New York City, for swimming pool in present high school. About $50,000.

Swimming Pool—Grand Rapids, Mich.—See "Buildings."

Cemetery—Lansing, Mich.—City election July 26 to vote on $38,000 bonds to enlarge Mt. Hope Cemetery.

Telephone Line — Livingston, Mont. — Paradise Valley Telephone Co., Livingston, plans to build 20. mi. telephone lines to farming community in Paradise Valley. R. B. Smith, pres.

Flood Protection—Chillicothe, Mo.—Grand River D. D., Livingston Co., having surveys and plans prepared building flood protection for Grand River Valley, to reclaim 100,000 acres of farm lands. About $1,500,000. Morgan Eng. Co., Goodwyn Institute Bldg., Memphis, Tenn., engrs.

Memorial Park—Kingsville, Tex.—City plans to build park. Plans include 35 x 100 ft. concrete swimming pool, dressing rooms for men and women, play ground, etc.

Park—Astoria, Ore—Chamber of Commerce and Bd. Park Dirs. having preliminary plans made for purchasing site and establishing park, to include ½ mi. race track, fair exhibit building, playground, bandstand, stadium, air-plane hangar, foot ball field, base ball grounds, grandstand and bleachers (between 8000 and 9000 seating capacity). Cost site, $37,100, and improvements $85,100. E. G. Gearhart, aud.

Retaining Wall—Linnton, Ore.—See "Industrial Works."

Sewerage System—Ore., Portland—City Council plans to build on East 37th St. and Raymond Ave. sewerage system in East 37th St. to Harold Aves. and 55th Ave. proposed trunk sewer; 53rd Ave. S. E.; 47th St. S. E.; 50th Ave.; East 39th St.; East 38th St.; East 40th St.; 41st St. S. E.; 42nd St. S. E.; 44th St. S. E.; 45th St. S. E.; estimated cost, cement or vitr. pipe, $43,282; including service and branch pipes, manholes, catchbasins and lampholes; also building sewerage system in East 77th St. N., vitr. or cement pipe, $5483; in East 76th St. vitr. or cement pipe, $4924. O. Laurgaard, city engr.

Harbor Improvements—Newport Beach, Cal.—Bd. Supervs. Orange Co., Santa Ana, voted following amounts to improve Newport Beach harbor: $137,000 for cutting new channel for Santa Ana River through sand; $270,000 for dredging channel in bay, $43,000 for wharf, warehouse and railroad connection; $50,000 for extending rock jetty. J. M. Banks, co. clk. Leeds & Barnard, Central Bldg., Los Angeles, engrs. Noted Apr. 17.

Water Meters—Tulare, Cal.—City plans to purchase 750 water meters. A. P. Bosworth, city engr.

Cement, Crushed Stone, etc. — Three Rivers, Que.—Bellefeuille & Trepanier, St. Francis Xavier St., plans to purchase 20,000 bags cement, 5000 cu.yd. crushed stone and 12,000 sq.yd. road steel mesh.

Incinerator—Verdun, Que.—City plans to build incinerating plant. About $106,500. G. E. Ghysene, City Hall engr.

Dike—Verdun, Que.—Town Council voted $600,000 by law to build dike here. G. E. Ghysene, City Hall, engr.

Purifier, etc.—Kingston, Ont.—Municipal Council plans to expend $30,000 for new purifier, $10,000 for liner and $10,000 for generator, in connection with gas plant.

Cement, Brick, etc.—Kitchener, Ont.—O. G. Scheifele, 43 Weber St., plans to purchase 100 bbls. cement, 26,000 rugged bricks and $4000 worth pine and chestnut lumber.

Garbage Incinerator—Niagara Falls, Ont.—City soon lets contract building incinerator. About $50,000. W. J. Seymour, clk. Noted June 12.

Turntable—Peterboro, Ont.—Canadian Pacific Ry., Windsor St., Montreal, Que., plans to build turntable here. About $30,000. J. R. M. Fairbairn, asst. ch. engr.

BIDS DESIRED

Cast Iron Pipe—Jersey City, N. J.—Until July 8, by city, furnishing and delivering c. i. water pipe.

Mason's Materials—Jersey City, N. J.—Until July 8, by city, furnishing and delivering 6 months supply of masons' materials to include lime, sand, cement, etc. Noted May 8.

Riprap, etc.—Ft. Pierce, Fla.—Until June 30, by C. M. Horton, secy. Ft. Pierce Inlet Dist., building inlet cut and riprapping work involves 85,000 cu.yd. earth excav., 1720 cu.yd. jetty hearting, 2200 tons jetty capping and 1200 cu.yd. riprap. M. Hallowes, Ft. Pierce, engr.; advertised in this issue.

Pumping Engine — Milwaukee, Wis. — Until July 16, by Central Bd. Purchases, City Hall, building pumping engine with 20,000,000 gal capacity. About $250,000. G. F. Staal, city engr.

Road Gravel—Cambridge, Minn.—Until July 14, by F. A. Norall, aud. Isanti Co., furnishing 7000 cu.yd. road gravel, f.o.b. Minneapolis, to be used for 5 mi. road. P. M. Torrell, Cambridge, engr.

Incinerator—Sedalia, Mo.—Until July 7, by city, furnishing material and building 20-ton incinerator. F. T. Leaming, city engr.

Dam—Gila Bend, Ariz.—See "Excavation and Dredging."

Pier and Freight Shed—Astoria, Ore.—Until July 1, by Port of Astoria Comn., for all labor and material, except plumbing, sprinkler system and electrical work for building Pier No. 3 and Freight Shed No. 4 Work involves furnishing and driving 280 brace piles, 4960 straight piles (all fender piles considered straight piles), involving 366,660 lin.ft. piling, 40-90 ft. under cutoff, 392,000 B. M. sash and sway bracing, 670,000 ft. B. M. lagging, 48,000 ft. B. M. whaling strips, 336,000 sheet piling; 11,000 cu.yd. rock rip rap; 35,200 lb. w.i. machine bolts; 31,000 lbs. wire w.i. boat spikes, 34,250 malleable washers; 1586 ft. pile and timber frontage, on Slip No. 2, 535 ft. pierhead line, 1760 ft. frontage on Slip No. 3, 100 ft. bulkhead across end of Slip No. 3, sand fill dredged in by 20 in. suction dredge, Natoma; building rein.-con. walls, frame trusses and roofs of freight shed 160 ft. 8 in. x 1520 ft., including fabricating and placing reinforcing steel, Ogden steel turnover doors, roller doors, rails, asphalt paving, hydrated lime, cement, etc. G. W. Warren, secy. R. R. Bartlett, ch engr.

Lift Gates—Los Angeles, Cal.—Until July 11, by Bd. Pub. Serv., furnishing hydraulic lift gates. W. Mulholland, 645 South Olive St., engr.

Lighthouse Tower, etc.—Ottawa, Ont.—Until July 7, by Marine Dept., Ottawa, building rein.-con. lighthouse tower, fog alarm building and dwelling combined, at Triple Island, in Brown Passage, northern British Columbia, for Dominion Government. Work involves 75 cu.yd. rock excav. and 525 cu.yd. rein.-con. About $25,000. B. H Fraser, c/o Marine Dept., engr.

Wharf—Thessalon, Ont.—Until July 11, by R. C. Desrochers, secy. dept. pub. works, rebuilding wharf in Dist. of Algoma. Noted Apr. 10 under "Canada."

Wharf—Comax, B. C.—Until July 15, by Dept. Pub Wks., Ottawa, Ont., repairing wharf here, pile and timber superstructure, 1014 ft. long, 20 ft. 8 in. wide and 100 x 137 ft. at end, with about 300 piles. Estimated cost, $20,000. E Lafleur, c/o Dept. Pub. Wks., ch. engr. Noted April 10 under "Canada."

Wharf—Half Moon Bay, B. C.—Until July 23, by Dept. Pub. Wks., Ottawa, building wharf in Comax-Atin Dist. R. C. Desrochers, secy.

Wharf—Naramata, B. C.—Until July 9, by Dept. Pub. Wks., Ottawa, Ont., building pile and timber wharf, Yale Dist., here, 182 ft. long, 48 ft. wide; also 1 story, 20 x 100 ft. frame warehouse on end of pier. About $25,000. E. Lafleur, c/o Dept. Pub. Wks., ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tank—Haverhill, Mass.—M. T. Stevens & Sons Co. let contract building 70,000 gal circular concrete fuel oil tank, 10 ft. deep, 35 ft. diam., for Pentucket Mills, to T. I. Ellis, 171 Westminster St., Providence, R. I.

★Capstans and Hoists—Albany, N. Y.—L. Nixon, supt. pub. wks., Capitol, let contract furnishing, testing and delivering electric capstans and trolley hoists at various barge canal terminals, Contr. 113, to General Electric Co., 527 West 34th St., New York City, cost $14,090; battery charging motor generator sets with switch board panels for barge canal terminals in New York City, Contr. 117, to Electric Products Co., 1067 East 152nd St., Cleveland, O., $5293. Noted June 12.

★Paving Materials—New York, N. Y.—F. L. Dowling, pres. Manhattan Boro., let contract furnishing and delivering 20,000 bags Portland cement and 100,000 sewer bricks, to J. A. McCarthy, 551 Exterior St., $15,400 and $1785, respectively; 2000 cu.yd. mixed aggregate, to C. Tompkins, $5300; 5800 cu.yd. binder stone and 3800 ton limestone, to New York Trap Rock Co., 101 Park Ave., $11,029 and $30,000, respectively; 200,000 wood paving blocks, to Amer. Creosoting Co., 17 Battery Pl., $9970; 600,000 gal. refined asphalt, to Warner Quinlan Asphalt Co., 79 Wall St., $32,820. Noted June 19.

Bulkhead—Hackensack, N. J.—City received lowest bid building bulkhead on Passaic River, from Linde & Griffith, foot 4th St., Newark, $16,500.

Pier—Phila., Pa.—Dept. Wharves, Docks & Ferries, Bourse Bldg., received bids, building, with appurtenant work, Penn Treaty Recreation Pier No. 57, North Delaware River, from Simpson & Brown, New York City, $52,105; Snare & Priest, Penn Bldg., $59,900, Armstrong & Latta, North Land Title Bldg., $63,677. Noted April 17.

★Retaining Walls—Hamilton, O.—H. Ford & Son, Inc., Dearborn and Michigan Sts., Detroit, Mich., let contract building retaining wall near factory site along reservoir, here, to F. K. Vaughn Bldg., Co., 204 Rentschler Bldg. About $300,000.

★Platform—Detroit, Mich.—See "Industrial Works.'

★Asphaltic Concrete—St. Paul, Minn.—H. W. Austin, city purch. agt., let contract furnishing 320 tons asphaltic concrete, to Camden Petroleum Co., 208 La Salle St., Chicago, $19 per ton in tank cars. Noted June 19.

★Retaining Wall—St. Louis, Mo.—M. Cates Stock Co., Syndicate Trust Bldg., let contract building rein.-con. retaining wall, 4 mi. long and 20 ft. high, 30 mi. northwest of here, to J. W. Strupps Co., 240 2nd St., Kansas City. About $38,000.

Pipe, Tanks, etc.—Florence, Ariz.—City let contract for wood pipe, to Pacific Pipe & Tank Co., Seattle, Wash., cost plus percentage basis; steel tanks, to Pittsburg, Des Moines Co., Des Moines, Ia., $7000; pumping machinery, engine and switchboard to Dousman Warner Co., $26,980; pipe lines and power house, to C. Fisher, 845 North 6th St., Phoenix, cost plus percentage basis.

Foundation—Tacoma, Wash.—City Park Bd. received bids building first unit of concrete foundation, 2, 3 or 4 bents, for proposed $500,000 pavilion and bath house at Point Defiance Park, from Pratt & Wilson, Tacoma, $27,894 on 2 bents, $14,180 for each extra bent, and $45,328 for 2 bents with floor above; S. C. Erickson, Natl. Realty Bldg.; $26,786 for 2 bents, $44,802 for adding floor above on 2 bents; Hurley Mason Co., Perkins Bldg., $22,896 on 2 bents, with suggested plan for change, reducing bid to $20,701.

★Mausoleum—Baker, Ore.—Mount Hope Abbey let contract building 31 x 53 ft. mausoleum to include sand tombs, 130 crypts, family and store rooms, stone exterior and cement interior, to Portland Mausoleum Co., Pittock Blk., Portland.

★Pier Shed, etc.—Portland, Ore.—Pub. Dock. Comn. let contract building pier shed superstructure with towers and conveyor galleries on one level section, Pier No. 1, St. Johns Municipal Terminal, east side Willamette River, North St. Johns Dist., to J. M. Dougan Ry. Exch Bldg., $235,950. Noted June 19.

★Swimming Pool, Gymnasium, etc.—Montreal, Que.—See "Buildings."

SEARCHLIGHT SECTION

PROPOSALS

Bids: Jan. 7.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, December 6th, 1918.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, January 7th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

—1—

CONTRACT NO. 191.

Erie Canal—Section 9.

For excavating the canal channel in the Genesee river south of the temporary dam near Elmwood avenue bridge.

Length about 0.62 mile. Sheets 1 to 5 inclusive.

—2—

CONTRACT NO. 192. (Readvertisement)

Erie Canal—Section 9.

For completing the canal from the east guard-lock to the Genesee river, and the work in Genesee Valley park.

Sheets 1 to 28, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bond required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. **Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.**

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work, according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds, co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., December 23, 1918.—Sealed Proposals will be opened in this office at 3 p. m., January 23, 1919, for the construction of the United States Post Office at Russellville, Ark. Drawings and specifications may be obtained from the custodian of the site at Russellville, Ark., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000	cubic yards
Reinforcing steel ...	1,550,000	pounds
Wood block or asphalt pavement..	8,276	square yards
Miscellaneous metal	25,000	pounds
Earth embankment.	22,000	cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.
Dec. 21, 1918.

Bids: Jan. 6.

Road Work

Tulsa, Okla.

Sealed bids will be received by the Board of County Commissioners of Tulsa County, Oklahoma, on Monday, January 6, 1919, until 2 o'clock in the County Court House of Tulsa, Oklahoma, for the construction of the hereinafter described roads; such roads to be graded and brought to the established grade, preparatory to the future hard surfacing of the same.

Section of State Road	Miles in Length
......"Y"......	......"6"......
......"H"......	......"6"......
......"K"......	......"4"......
......"L"..(Mi. 4-5 & 6)	......"3"......
......"N"......	......"5"......
......"D"......	......"7"......
......"A"..(Mi. 1 & 2)	......"2"......

The Commissioners reserve the right to reject any and all bids, all bids to be accompanied by a certified check covering 10% of bid. Plans and specifications are now on file in the office of the County Engineer of Tulsa, Oklahoma.

BY ORDER OF THE BOARD OF COUNTY CAMMISSIONERS OF TULSA COUNTY

LEWIS CLINE,
County Clerk.

Bids: Jan. 14.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, January 14th, 1919, at which place and hour they will be publicly opened and read, for improving the Cayuga and Seneca canal pursuant to the provisions of Chapter 391 of the Laws of 1909, and Chapter 147 of the Laws of 1903, and amendatory laws, and for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

—1—

CONTRACT "T"

Cayuga and Seneca Canal—Section 1.

For extending the core wall and other work at the north end of Dam No. 2, Seneca Falls.

Sheets 1 and 2.

—2—

CONTRACT NO. 197.

Erie Canal—Section No. 2.

For drilling holes in the sill of the dam and the toe of the river wall of the lock, near Rotterdam, and making necessary repairs.

Sheets 1 and 2.

And for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—3—

TERMINAL CONTRACT NO. 102.

For furnishing and installing two three-ton electric semiportal revolving jib cranes on Pier 6, East river, New York City.

Contract plans, sheets 1 to 17 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract, in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.
Dec. 13, 1918.

Bids: Jan. 6.

Advertising $100,000 Contract Concrete Culverts

Tulsa, Okla.

Sealed bids will be received by the Board of County Commissioners of Tulsa County, Oklahoma, on Jan. 6, 1919, until 2 o'clock P.M., in the County Court House of Tulsa, Oklahoma, for the construction of the following described culverts:

Mile 6, Sec. D, 4' x 3' x 26' Concrete Culvert (Standard).

Mile 6, Sec. R, Concrete Box 4' x 3' x 24' (Standard).

Mile 6, Sec. R, Concrete Box 4' x 3' x24' (Standard).

Mile 4, Sec. M, Concrete Culvert 8' x 4' x 24' (Standard).

Mile 4, Sec. M, Concrete Culvert 8' x 4' x 24' (Standard).

Mile 4, Sec. L, Concrete Culvert 8' x 4' x 37' (Standard).

Mile 4, Sec. L, Concrete Culvert 6' x 4' x 42' (Standard).

Mile 4, Sec. L, Concrete Culvert 6' x 4' x 42' (Standard).

Mile 1, Sec. L, 3' x 6' x 15' extension to culvert.

Mile 2, Sec. L, 10' x 3.5' x 8' extension to culvert.

Mile 4, Sec. K, 25' of 30" Vitrified tile, Concrete H. W.

Mile 4, Sec. K, 25' of 30" Vitrified tile, Concrete H. W.

Mile 3, Sec. K, 25' of 30" Vitrified tile, Concrete H. W.

Bt. Sec. 28 & 33, T. 21, R. 13, 36' x 16' steel concrete Br. Steel to be furnished by county.

Bt. Sec. 20 & 29, T. 21, R. 13, 30' x 16' steel concrete Br. Steel to be furnished by county.

Mile 1, Sec. H, 9' extension and wings, to 2' x 3' box culvert.

Mile 2, Sec. H, 4' x 4' x 26' Concrete Culvert (Standard).

Mile 3, Sec. H, 5' x 7' x 3' extension to Concrete Culvert.

Mile 5, Sec. H, 3' x 3' x 24' Concrete Culvert (Standard).

The Commissioners reserve the right to reject any and all bids, all bids to be accompanied by a certified check covering 10% of bid. Plans and specifications are now on file in the office of the County Engineer in Tulsa, Oklahoma.

BY ORDER OF THE BOARD OF
COUNTY COMMISSIONERS
By LEWIS CLINE,
County Clerk.

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF
SEATTLE
By T. S. LIPPY, Secretary.

Bids: Jan. 21.

Road Work

STREET DEPARTMENT

Charleston, S. C., Dec. 28, 1918.

Sealed proposals will be received by the undersigned until six o'clock P.M., Tuesday, January 21, 1919, for 20,000 sq.yd. more or less of sheet asphalt pavement. The right is reserved to reject any or all bids. For specifications and other information address,

J. H. DINGLE,
City Engineer.

SEALED PROPOSALS will be received at this office, Room 511, District Building, until 2 o'clock P.M., on Jan. 14, 1919, for the construction of sewers in the District of Columbia, involving the construction of approximately 140 lin.ft. of 7 ft. 0 in. x 7 ft. 0 in. concrete sewer and 1065 lin.ft. of 6 ft. 0 in. x 6 ft. 0 in. concrete sewer. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineering Department, Room 427, District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners, D. C.

PROPOSALS

Bids: Jan. 14.

Heating, Plumbing, etc.

Sonyea, N. Y.

Sealed proposals for construction, heating, plumbing and drainage and electric work for dining room and kitchen buildings, West Group, Craig Colony for Epileptics, Sonyea, N. Y., will be received by Hon. Percy L. Lang, president of the Board of Managers, Craig Colony for Epileptics, Sonyea, N. Y., until 2 o'clock P.M., on Tuesday, January 14, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3102, 3104, 3105 and 3106. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the Craig Colony for Epileptics, Sonyea, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: December 24, 1918.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

POSITIONS VACANT

CLEVELAND engineer and general contractor has steady work for mechanical man on design of heating systems, power and general plant piping, etc. Give experience and salary wanted. P-221, Eng. News-Record, Leader-News Bldg., Cleveland.

COMPETENT chemist wanted; one thoroughly familiar with the distillation of tar oils. State experience and salary desired. The Jennison-Wright Company, Toledo, Ohio.

DESIGNING mechanical engineer, thoroughly experienced in design of cranes, coal and ore handling bridges and towers, coal screening and sizing equipments, shipbuilding and wharf cranes, coal tipple equipments, conveying machinery, etc. High-grade technical man wanted to take charge of design. State education, nationality, salary desired. Information confidential. Location, Canada. P-217, Eng. News-Record.

DRAFTSMAN wanted, paper mill work. Permanent position. $125.00 to start. Address P-218, Eng. News-Record, Phil.

DRAFTSMEN and detailers wanted for industrial plant layout work, preferably men with experience in elevating and conveying machinery. State age, education, nationality, previous experience and salary desired. P-143, Eng. News-Record, Philadelphia.

GENERAL manager for a small structural fabricating shop, capacity 200 to 300 tons per month. Located in Middle West. Man under 40 years preferred. Must give good reference, be capable of taking full control of business. State experience and salary desired. P-222, Eng. News-Record, Leader-News Bldg., Cleveland.

POSITIONS VACANT

HIGH GRADE master mechanic wanted for medium sized Meat Packing Plant. Address P-819, Eng. News-Record, Chicago.

ENGINEER or high class draftsman wanted with experience in the design and construction of belt conveyors. Must be able to make up attractive sales sketches of proposed simple conveyor installations of limited sizes. Man preferred that can direct the publication of printed matter illustrating standardized belt conveyors constructed from standard parts which we manufacture. Position is permanent with attractive future. In answering, state age, whether married, education, experience, whether now employed, habits and what salary expected. Location one half hour from N Y City. P-254, Eng. News-Record.

JUNIOR (civil) engineers for work on subway construction, New York City; provisional appointments pending examination; entrance salary, $1501 per annum, with opportunities of advancement; two years' construction experience required; technical graduates preferred; open to citizens only. Apply, giving full information as to education and experience to the Public Service Commission, 49 Lafayette Street, New York City.

MECHANICAL engineer with experience in cement industry wanted for large cement plant in East. State past experience and salary expected. P-225, Eng. News-Record, Philadelphia.

SUPERINTENDENT or assistant superintendent wanted, who has had cement mill and quarry experience to take charge of a large lime and stone crushing plant. Must be a hustler and good practical man, able to handle several hundred men. Splendid opening for the right man, with an excellent future. Man with cement mill experience preferred. State fully previous experience, reason for desiring change, and salary expected. P-223, Eng. News-Record, Philadelphia.

Draftsman and Estimator
Structural and Ornamental
Iron-Work

Medium Sized Plant at
Detroit, Mich.

Reply Stating—Age, Experience and Salary Desired

P87—Eng. News-Record
657 Leader-News Bldg, Cleveland, Ohio

DRAFTSMAN and ESTIMATOR

Medium sized plant of Structural and Ornamental Iron Work, Detroit, Mich., wants Chief Draftsman and Estimator. Address reply, stating experience, competency and salary desired, to

P137—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

For some time we have been improving the Construction News section of the ENGINEERING NEWS-RECORD. That we are not yet satisfied is proved by this advertisement. At least

37 CORRESPONDENTS ARE WANTED

who are in close touch with construction work and can devote a little spare time during business hours to gathering reports. Representatives are wanted in the following centers:

Atlanta, Ga.
Augusta, Me.
Austin, Texas
Birmingham, Ala.
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Carson City, Nev.
Chattanooga, Tenn.
Cheyenne, Wyo.
Concord, N. H.
Erie, Pa.
Helena, Mont.
Jersey City, N. J.
Johnstown, Pa.
Kansas City, Mo.
Lansing, Mich.
Lincoln, Neb.
Little Rock, Ark.
Lowell, Mass.
Montgomery, Ala.
Montreal, Que.
Newark, N. J.
New Orleans, La.
Oklahoma, Okla.
Omaha, Neb.
Phoenix, Ariz.
Pierre, S. D.
Quebec
Reading, Pa.
Richmond, Va.
Sacramento, Cal.
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Topeka, Kan.
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Write—telling all about your present work and how much time you have available—to

L. V. FLETCHER
Engineering News-Record, 10th Ave., at 36th Street, New York

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Educational
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Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted
Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space in 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in., $4.00 an in. 15 to 26 in., $3.70 an in.
4 to 7 in., 3.90 an in. 27 to 49 in., 3.60 an in.
8 to 14 in., 3.80 an in. 50 to 99 in., 3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind," ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
1570 Old Colony Bldg.,	Chicago
657 Leader-News Bldg.,	Cleveland
935 Real Estate Trust Bldg.,	Philadelphia
501 Rialto Bldg.,	San Francisco
519 Newhouse Bldg.,	Salt Lake City

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

WANTED

CHIEF ENGINEER

For Portland Cement Plant in Lehigh Valley, familiar with Water Tube Boilers, Cross-Compound Corliss Condensing Engines, A.C. Generators and Motors. Give full experience and references, salary wanted and how soon you could report for work.

P279—Engineering News-Record
10th Ave. at 36th St., New York City

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

THE CORNELL SOCIETY OF CIVIL ENGINEERS

Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

WANTED

STRUCTURAL DESIGNERS AND ESTIMATORS

Address reply stating experience and salary desired to P. O. Box 984, Buffalo, N. Y.

POSITIONS VACANT

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record, Philadelphia.

WANTED immediately by cement plant, located near city: Experienced quarry foreman, permanent position. Write, stating experience, whether married or single, and salary expected. P-288, Eng. News-Record.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

THE ENGINEERING AGENCY, the oldest technical employment bureau in the world, now in its twenty-sixth successful year, has positions open for engineers and draftsmen. Particulars furnished free on request—no advance fee if you mention this advertisement. 1662 Monadnock Bldg., Chicago, Ill.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

POSITIONS WANTED

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

GRADUATE mechanical engineer, 29 years old, 1½ years on construction, 3 years' purchasing experience in connection with public utilities and general contractors, desires position in purchasing department where purchases are made in accordance with commercial and engineering principles. PW-289, Eng. News-Record.

MECHANICAL engineer, draftsman, technical training, 15 years' experience general and special machine designing, also reinforced concrete, and general engineering construction, open for position Would be valuable to engineering and contracting company or concern contemplating improvements or extension to plant and equipment. PW-209, Eng News-Record.

MECHANICAL engineer, assistant superintendent plant maintenance and production, construction, purchase and installation of electrical machinery and factory equipment, design and upkeep power plants, handle men, business experience, responsible position desired, salary, $200 month, location New York City or vicinity. PW-207, Eng. News-Record.

Civil Engineers

AVAILABLE at once, graduate civil engineer, 9 years' field and office experience, factory design, construction, equipment and maintenance. PW-135, Eng. News-Record.

THE BEST WAY

to get a good position in Drafting or Engineering is to file an application direct with some of our clients who are depending on us to get competent and experienced applicants for their Vacant Positions. Send stamp for Blank and List of Vacant Positions.

The Cleveland Engineering Agency Co.
Rose Building, Cleveland, Ohio

HUNDREDS OF SUCCESSFUL DRAFTSMEN AND ENGINEERS
owe their Rapid Advancement to PROFICIENCY in my **SYSTEM OF LETTERING.**

Correspondence Course of
RECOGNIZED STANDARD by Author of System. — Guarantee Results.

C. W. REINHARDT
Arlington. N.J.

Perspectives
Commercial
Drafting Maps

Freehand
Lettering

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000 cubic yards
Reinforcing steel ...	1,550,000 pounds
Wood block or asphalt pavement..	8,270 square yards
Miscellaneous metal	25,000 pounds
Earth embankment.	22,000 cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.
Dec. 21, 1918.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing

PROPOSALS

causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE
By T. S. LIPPY, Secretary.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

PROPOSALS

Bids: Jan. 21.

Road Work

STREET DEPARTMENT
Charleston, S. C., Dec. 28, 1918.

Sealed proposals will be received by the undersigned until six o'clock P.M., Tuesday, January 21, 1919, for 20,000 sq.yd. more or less of sheet asphalt pavement. The right is reserved to reject any or all bids. For specifications and other information address,

J. H. DINGLE,
City Engineer.

Bids: Jan. 24.

State Road Construction

KANSAS HIGHWAY COMMISSION,
TOPEKA, KANSAS
SHAWNEE COUNTY
Topeka, Kansas.

Notice is hereby given that sealed proposals will be received at the office of the County Clerk of Shawnee County, Topeka, Kansas, up and until 11:00 o'clock A.M., January 24, 1919, for the construction of the Topeka-Lawrence State Road on the Fort to Fort Highway in Shawnee County.

The improvement is to be two-course Portland cement concrete 18 ft. wide, 5 ft. earth shoulders, together with all work as shown on the plans and in the specifications.

The total net length of the improvement is 51799.6 ft. Bids will be received as follows:

Alternative Proposal No. 1, Sections A and B, length of improvement 51,799.6 ft.

Alternative Proposal No. 2, Section A, length of improvement 20,536.5 ft.

Alternative Proposal No. 3, Sections B, length of improvement 31,263.1 ft.

Plans are on file for inspection in the offices of the County Engineer and County Clerk at the Courthouse, Topeka, Kansas, and in the office of the State Highway Commission, State House, Topeka, Kansas.

All bids must be accompanied by a check for five (5) per cent. of the value of the work.

The County Board reserves the right to waive technicalities and reject any or all proposals.

December 27, 1918.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposalsw ill be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

Money can be saved by getting these men to figure on new work. Advertisements for bids published in ENGINEERING NEWS-RECORD secure maximum competition—the most bidding by the best bidders.

No work is too small, none too large, to be beyond the money-saving quality-insuring influence of NEWS-RECORD Proposal advertising. Cost is only $3.60 an inch.

Proposal ads invariably save large sums on contract prices.

Plans and specifications for work advertised in the Engineering News-Record may be filed without extra expense at our New York, Philadelphia, Cleveland, Chicago or San Francisco offices for the convenience of prospective bidders.

Engineering News-Record
10th Ave. at 36th St.
New York

37

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted
Evening Work Wanted
Vacation Work Wanted
Tutoring
Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted
Agents Wanted
Business Opportunities
Desk Room for Rent
Educational
Employment Agencies
Desk Room Wanted
Foreign Business
Positions Vacant
Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted
Miscellaneous for Sale, for Rent or Want Ads.

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(Individual space, within border rules.)

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SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
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Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind," ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
1570 Old Colony Bldg.,	Chicago
657 Leader-News Bldg.,	Cleveland
935 Real Estate Trust Bldg.,	Philadelphia
501 Rialto Bldg.,	San Francisco
519 Newhouse Bldg.,	Salt Lake City

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

WANTED

CHIEF ENGINEER

For Portland Cement Plant in Lehigh Valley, familiar with Water Tube Boilers, Cross-Compound Corliss Condensing Engines, A.C. Generators and Motors. Give full experience and references, salary wanted and how soon you could report for work.

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Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

THE CORNELL SOCIETY OF CIVIL ENGINEERS
Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

WANTED

STRUCTURAL DESIGNERS AND ESTIMATORS

Address reply stating experience and salary desired to P. O. Box 984, Buffalo, N. Y.

POSITIONS VACANT

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record, Philadelphia.

WANTED immediately by cement plant, located near city: Experienced quarry foreman, permanent position. Write, stating experience, whether married or single, and salary expected. P-288, Eng. News-Record.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

THE ENGINEERING AGENCY, the oldest technical employment bureau in the world, now in its twenty-sixth successful year, has positions open for engineers and draftsmen. Particulars furnished free on request—no advance fee if you mention this advertisement. 1662 Monadnock Bldg., Chicago, Ill.

Employment Service

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Mechanical and Electrical

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

POSITIONS WANTED

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

GRADUATE mechanical engineer, 29 years old, 1½ years on construction, 3 years' purchasing experience in connection with public utilities and general contractors, desires position in purchasing department where purchases are made in accordance with commercial and engineering principles. PW-289, Eng. News-Record.

MECHANICAL engineer, draftsman, technical training, 15 years' experience general and special machine designing, also reinforced concrete, and general engineering construction, open for position. Would be valuable to engineering and contracting company or concern contemplating improvements or extension to plant and equipment. PW-209, Eng. News-Record.

MECHANICAL engineer, assistant superintendent plant maintenance and production, construction, purchase and installation of electrical machinery and factory equipment, design and upkeep power plants, handle men, business experience, responsible position desired, salary, $200 month, location New York City or vicinity. PW-207, Eng. News-Record.

Civil Engineers

AVAILABLE at once, graduate civil engineer, 9 years' field and office experience, factory design, construction, equipment and maintenance. PW-135, Eng. News-Record.

THE BEST WAY

to get a good position in Drafting or Engineering is to file an application direct with some of our clients who are depending on us to get competent and experienced applicants for their Vacant Positions. Send stamp for Blank and List of Vacant Positions.

The Cleveland Engineering Agency Co.
Rose Building, Cleveland, Ohio

HUNDREDS OF SUCCESSFUL DRAFTSMEN AND ENGINEERS owe their Rapid Advancement to PROFICIENCY in my SYSTEM OF LETTERING.

Correspondence Course of RECOGNIZED STANDARD by Author of System. — Guarantee Results.

C. W. REINHARDT
Arlington, N.J.

Freehand Lettering

Perspectives, Commercial Drafting, Maps.

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000 cubic yards
Reinforcing steel ...	1,550,000 pounds
Wood block or asphalt pavement..	8,270 square yards
Miscellaneous metal	25,000 pounds
Earth embankment.	22,000 cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.
Dec. 21, 1918.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE
By T. S. LIPPY, Secretary.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

Bids: Jan. 21.

Road Work

STREET DEPARTMENT
Charleston, S. C., Dec. 28, 1918.

Sealed proposals will be received by the undersigned until six o'clock P.M., Tuesday, January 21, 1919, for 20,000 sq.yd more or less of sheet asphalt pavement. The right is reserved to reject any or all bids. For specifications and other information address,

J. H. DINGLE,
City Engineer.

Bids: Jan. 24.

State Road Construction

KANSAS HIGHWAY COMMISSION,
TOPEKA, KANSAS
SHAWNEE COUNTY
Topeka, Kansas.

Notice is hereby given that sealed proposals will be received at the office of the County Clerk of Shawnee County, Topeka, Kansas, up and until 11:00 o'clock A.M., January 24, 1919, for the construction of the Topeka-Lawrence State Road on the Fort to Fort Highway in Shawnee County.

The improvement is to be two-course Portland cement concrete 18 ft. wide, 5 ft. earth shoulders, together with all work as shown on the plans and in the specifications.

The total net length of the improvement is 51799.6 ft. Bids will be received as follows:

Alternative Proposal No. 1, Sections A and B, length of improvement 51,799.6 ft.

Alternative Proposal No. 2, Section A, length of improvement 20,536.5 ft.

Alternative Proposal No. 3, Sections B, length of improvement 31,263.1 ft.

Plans are on file for inspection in tne offices of the County Engineer and County Clerk at the Courthouse, Topeka, Kansas, and in the office of the State Highway Commission, State House, Topeka, Kansas.

All bids must be accompanied by a check for five (5) per cent. of the value of the work.

The County Board reserves the right to waive technicalities and reject any or all proposals.

December 27, 1918.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposalsw ill be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

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Engineering News-Record
10th Ave. at 36th St.
New York

37

POSITIONS VACANT

BOILER room foreman wanted, also refrigeration foreman, for medium-sized packing house in Middle West. P-316, Eng. News-Record.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

CIVIL engineer-draftsman wanted, experienced in municipal engineering, waterworks and sewer design. Position offers advancement. Apply to B. M. Hart, City Engineer, Oklahoma City, Okla.

COMPETENT chemist wanted; one thoroughly familiar with the distillation of tar oils. State experience and salary desired. The Jennison-Wright Company, Toledo, Ohio.

DRAFTSMAN with electrolytic experience. Give age, experience, salary, and when possible to report. Location, Chicago district. P-315, Eng. News-Record, Chicago.

DRAFTSMEN and detailers wanted on fabricated steel hulls. Address P-373, Engineering News-Record.

EXPERIENCED structural draftsmen and checkers. Apply stating experience, education, and salary expected. Whitehead & Kales Iron Works, Detroit, Mich.

HIGH GRADE master mechanic wanted for medium sized Meat Packing Plant. Address P-819, Eng. News-Record, Chicago.

INDUSTRIAL concern has opening for a technically trained engineer with construction experience and executive ability; headquarters, New York City. State briefly complete details of training, experience, age, salary, etc., in original application. P-317, Eng. News-Record.

MECHANICAL engineer to fill position as estimator and correspondent in New York sales office handling all types of pumping equipment, condensers, feed water heaters, etc. Write stating experience, age and salary expected to P-314, Eng. News-Record.

RAILROAD engineer experienced on construction to act as assistant pilot on valuation, Eastern district. State education, experience, salary expected and when available. 127 E. Baltimore St., Baltimore, Md.

SUPERINTENDENT or assistant superintendent wanted, who has had cement mill and quarry experience to take charge of a large lime and stone crushing plant. Must be a hustler and good practical man, able to handle several hundred men. Splendid opening for the right man, with an excellent future. Man with cement mill experience preferred. State fully previous experience, reason for desiring change, and salary expected. P-223, Eng. News-Record, Philadelphia.

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record.

TRACK body or trailer, designer wanted; Watson, Canastota, N. Y.

EMPLOYMENT AGENCIES

TEACHERS wanted. The Interstate Teachers' Agency, Macheca Bldg., New Orleans, La., recommends teachers in all departments of engineering for college and university positions. Special terms offered.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ARMY officer, electrical engineer, desires civilian connection, seven years' broad experience, testing, appraisal, engineering, purchasing. PW-405, Eng. News-Record, Phila.

ASSISTANT mechanical engineer, married, 24 years old, college education, experienced in plant construction, inspection, design of special machinery, etc., desires position with well established company. Will consider any location in U. S. PW-363, Eng. News-Record.

ELECTRICAL engineer, familiar with erection and operation of power plants, industrial installations, electrical and mechanical transmission of power, cable and signal work, capable of handling men, will shortly be available for a position requiring an aggressive, competent and experienced executive. PW-157, Eng. News-Record.

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

MECHANICAL engineer, all branches with good concern permanently desired; near New York; salary not less than $50 per week; active experience over 20 years, covering construction, machinery installation and can handle men. PW-392, Eng. News-Record.

MECHANICAL, industrial engineer, practical and technical education; aged 32; married; American; now holding responsible position with large corporation, good organizer and systematizer, experienced in reviewing of tenders and writing of specifications, extensive experience in plant layout, conveying and transmission machinery and general heavy machine design. Shop and construction experience. PW-391, Eng. News-Record.

THE CORNELL SOCIETY OF CIVIL ENGINEERS

Maintains a Registration Bureau

Complete records of 2000 Cornell men are on file. Employers may consult these records without charge. Address

REGISTRATION BUREAU
30 East 42nd St., New York
Room 916 3075 Murray Hill

DREDGING MANAGER WANTED

by a large contracting firm to take charge of their valuable dredging and marine plant. Only men of exceptional ability and large experience in similar position need apply. All applications will be treated as confidential.

P312—Eng. News-Record
10th Ave. at 36th St., New York City

Construction and Industrial Laborers—Mechanics Supplied

free of any charge to employers, provided transportation is advanced.

Commissaries conducted on a modern plan.

EMPIRE LABOR AGENCY
93 Mulberry St., New York City
Telephones Franklin 1745-3164

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred.

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

STRUCTURAL STEEL DRAFTSMEN

wanted immediately for shipyard production department work. Answer in full regarding age, salary expected, when available, etc., to

F. T. WARNER
Groton Iron Works
Groton, Conn.

DRAFTSMAN and ESTIMATOR

Medium sized plant of Structural and Ornamental Iron Work, Detroit, Mich., wants Chief Draftsman and Estimator. Address reply, stating experience, competency and salary desired, to

P137—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

HULL DRAFTSMEN

for breakdown work in production department. Reply with full particulars regarding age, salary expected, experience, when available, etc., to

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Groton, Conn.

POSITIONS VACANT

BOILER room foreman wanted, also refrigeration foreman, for medium-sized packing house in Middle West. P-316, Eng. News-Record.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

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Groton Iron Works
Groton, Conn.

SEARCHLIGHT SECTION

PROPOSALS

Bids: Jan. 22.

Reinforced Concrete Bridge

Ft. Smith, Arkansas.

Sealed proposal for the construction of a reinforced concrete arch bridge and approaches thereto, across the Arkansas River at Garrison Avenue, Ft. Smith, Arkansas, will be received until two o'clock P.M. of Wednesday, January twenty second, 1919, by the Commissioners of the Sebastian Bridge District, at the office of the District in Ft. Smith, Arkansas.

A certified check for an amount equal to not less than five per cent. (5%) of the amount of the bid, drawn on a responsible bank in the city of Ft. Smith, to the order of the Commissioners of the Sebastian Bridge District, must be filed with each bid.

Plans and specifications are now on file in the office of the Commissioners of the Sebastian Bridge District, and in the office of Hedrick & Hedrick, Consulting Engineers, 506 Interstate Building, Kansas City, Missouri. All parties desiring to bid upon the work may obtain complete plans and specifications by applying to the Consulting Engineers named above.

The following are the approximate quantities of the principal items included in the work.

Concrete	20,000	cubic yards
Reinforcing steel ...	1,550,000	pounds
Wood block or asphalt pavement..	8,270	square yards
Miscellaneous metal	25,000	pounds
Earth embankment.	22,000	cubic yards

The Commissioners reserve the right to reject any or all bids. Final action on the bids will be taken by the Commissioners within fifteen days after the opening of said bids.

By order of the Commissioners, Sebastian Bridge District, Ft. Smith, Arkansas.

By ROY M. JOHNSTON, Secretary.
Dec. 21, 1918.

Farm Grading and Drainage

New York City.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

PROPOSALS

Bids: Feb. 19.

Smith's Cove Improvement

Port of Seattle, Wash.

Notice is hereby given that the Port Commission of the Port of Seattle, State of Washington, will receive sealed proposals up to 2:00 o'clock, February 19, 1919, at its office, Bell Street Warehouse, at the foot of Bell Street, Seattle, Washington, for the furnishing and installation of a Gantry Crane, Smith's Cove Improvement, Pier "B," all of said material to be furnished in accordance with the specifications and plans for the same, now on file in the office of the said Port Commission, which said specifications and plans are now subject to public inspection.

Bidders are invited to submit alternative bids upon designs of their own for accomplishing the purpose of the specifications and plans prepared by the said Port Commission.

Each bid must be accompanied by a certified check payable to the order of the Port Commission of the Port of Seattle for a sum not less than five per cent. of the amount of bid.

The Port Commission reserves the right to reject any and all bids.

Dated at Seattle, Washington, this 18th day of December, 1918.

PORT COMMISSION OF THE PORT OF SEATTLE
By T. S. LIPPY, Secretary.

OFFICE OF THE COMMISSIONERS, Washington, D. C.—Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., February 11, 1919, for constructing a concrete encased steel plate girder bridge in the line of South Dakota Avenue crossing the tracks of the Baltimore & Ohio R.R. Company. Forms of Proposals, Specifications, and necessary information may be obtained from the Chief Clerk of the Engineering Department, Room 427, District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, C. W. Kutz, Commissioners, D. C.

PROPOSALS

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta,

Bids: Feb. 6.

Sewerage System Improvement

Syracuse, N. Y.

Sealed proposals for contract No. 27 for the construction of Divisions 3, 4 and 5, Onondaga creek improvement and the main intercepting sewer, will be received until 2 o'clock P.M., February 6, 1919, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y. The work embraces approximately 2 miles of creek improvement and 1.3 miles of intercepting sewer. Proposals may be made under three alternatives which cover the whole or proportions of the work. The principal items of the whole work are 111,500 cu.yd. excavation and 18,000 cu.yd. concrete. This contract is to continue the work started under a contract which was cancelled on account of the war. The Board has in its possession to be used upon the new contract practically all of the reinforced concrete pipe which has been manufactured for the sewer and its lying on the site thereof. The Board also has cast iron siphons, a traveling concrete mixer and 4 flat cars for use upon the new contract. Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or certified check for $5,000 or $10,000 for each division for which a bid is submitted. Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies may be obtained by depositing $10 to insure their return in acceptable condition on or before February 15, 1919.

HARRY J. HAMLIN,
Secretary.

PROPOSALS

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Baltimore, Md., at 2 o'clock P.M., March 1, 1919, for construction of concrete foundation and placing of rip rap at Tangier Sound Light Station, Va. Information upon application to the above office.

SEALED PROPOSALS will be opened by the Superintendent of Lighthouse, Buffalo, N. Y., at 2 o'clock P.M., February 10, 1919, for furnishing metal work for third order helical bar lantern, including plate glass. Information upon application to the above office.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

Bids: Jan. 25.

Setting and Connecting Boilers

Hoffman Island.

Sealed proposals for Setting and Connecting Two Boilers (Repairs or Replacement of Equipment), Quarantine Station, Hoffman Island, N. Y., will be received by Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, New York, until 12 o'clock noon, Saturday, January 25, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, adn shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3159. The right is reserved to reject any or all bids. Drawings and specialfications and blank forms of proposal may be consulted at the office of Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and Specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 13, 1919.

POSITIONS VACANT

ADVERTISING manager, who knows trade journals, mailing lists, sales letter writing and catalog work. Must be an executive, hustler and produce results. Should have broad knowledge of machinery, equipment, etc. Right salary to right man. In first letter tell us all about yourself and salary expected. Confidential. Walter A. Zelnicker Supply Co., St. Louis, Missouri.

BRIDGE designer, experienced in both steel and reinforced concrete, for preparation of standard and special designs; permanent work; salary, $150 per month. Submit detailed statement of education and experience, age, nationality, time you can report, and sample of your drafting. Missouri State Highway Department, Jefferson City, Mo.

ESTIMATOR wanted, capable of taking off and pricing quantities in all classes of general contracting work. Only experienced man need reply, stating age, experience and salary expected. P-431, Eng. News-Record.

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

POSITIONS VACANT

MAN with civil engineering education or broad knowledge of that field, also experienced in engineering promotion publicity work, particularly familiarity with concrete construction and its application to all kinds of structures as well as roads, to train for position as editorial assistant. Work requires unusual ability, foremost in which is ability to write well, simply and clearly in popular vein, much of which will have to be developed through experience in the particular position above mentioned. Salary commensurate with actual ability in work mentioned at the start, with satisfactory prospects as efficiency is acquired. To enable intelligent consideration of your application, age, past and present connections, salary earned and desired, education, and any other points or qualifications you wish to bring out should be mentioned at length. Box P-458, Eng. News-Record, Chicago.

DRAFTSMAN with electrolytic experience. Give age, experience, salary, and when possible to report. Location, Chicago district. P-315, Eng. News-Record, Chicago.

DRAFTSMEN and detailers wanted on fabricated steel hulls. Address P-373, Engineering News-Record.

POSITIONS VACANT

MASTER mechanic—Position as master mechanic of one of the largest car shops in the Middle West is open for a man who can qualify. Position requires executive, technical and practical ability. Give details of training, experience, present salary, etc. P-465, Eng. News-Record, Chicago.

INSPECTOR to teach civil engineering subjects by correspondence, in an Eastern city. Position permanent for one who can qualify. State education, experience and initial salary expected. P-224, Eng. News-Record, Philadelphia.

SYSTEMATIZER wanted. A retail coal and building material yard in New England, laying out new yards, requires the services of an experienced man to lay out the yards and warehouses and systematize the handling and loading facilities. Address, System, stating terms. P-414, Eng. News-Record.

TECHNICAL writer in civil engineering subjects, in Eastern city. Ability to write clearly, and several years' experience in steel and reinforced concrete construction essential. Position permanent for one who can qualify. State education, experience and initial salary expected. P-255, Eng. News-Record.

AN OPPORTUNITY to make some extra money. Construction work is ready for a big boom and the Engineering News-Record wants to publish it all. To do this we must add to our list at least

36 CORRESPONDENTS

The kind of men we want are those who are in close touch with construction work in their community and can devote a little spare time during business hours to calling on engineers, contractors, etc., gathering reports. Representatives are wanted in the following centers:

Atlanta, Ga.
Augusta, Me.
Austin, Texas
Birmingham, Ala.
Boston, Mass.
Carson City, Nev.
Chattanooga, Tenn.
Cheyenne, Wyo.
Concord, N. H.
Erie, Pa.
Harrisburg, Pa.
Jersey City, N. J.
Kansas City, Mo.
Lansing, Mich.
Little Rock, Ark.
Lowell, Mass.
Madison, Wis.
Montgomery, Ala.
Montreal, Que.
New Orleans, La.
Oklahoma, Okla.
Omaha, Neb.
Philadelphia, Pa.
Phoenix, Ariz.
Pierre, S. D.
Pittsburgh, Pa.
Providence, R. I.
Quebec
Richmond, Va.
Sacramento, Cal.
Tallahasse, Fla.
Topeka, Kan.
Toronto, Ont.
Trenton, N. J.
Vancouver, B. C.
Worcester, Mass.

Write—telling all about your present work and how much time you have available—to

L. V. FLETCHER

Engineering News-Record, 10th Ave., at 36th Street, New York

District Manager

We want a high-grade man capable of taking charge of our Chicago District Office on either salary or commission or both. We have a very attractive proposition for the right man who must thoroughly understand the Contractors' Machinery business and come with a clear record and a reputation of having produced the business in whatever locality he has been or is now located.

We invite correspondence.

OSHKOSH MFG. COMPANY
Oshkosh, Wis.

PROPOSALS

Bids: Feb. 14.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS AND FERRIES

550 Bourse Building, Philadelphia.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Kenilworth Street Pier, No. 30 South Delaware Wharves," will be received until 12 o'clock noon, Friday, February 14, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of twenty five dollars ($25.00), to cover the cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition, and unmarked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Ace of June 18, 1917, relative to workingmen's compensation, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance requiring proposal bonds on all bids exceeding in amount $500, approved May 25, 1860, have been complied with.

The Director reserves the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

January 18, 1919.

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Rumson for the permanent improvement of the Rumson Road, in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P.M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 14.

Furnishing Screens and Guards

Bedford Hills, N. Y.

Sealed proposals for construction work (screens and guards)—Additional window guards for two cottages of farm group, New York State Reformatory for Women, Bedford Hills, N. Y., will be received by William G. Barrett, President of the Board of Managers, New York State Reformatory for Women, Bedford Hills, N. Y., until 10.30 A.M. on Friday, February 14, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3116-R. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Reformatory for Women, Bedford Hills, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 15, 1919.

Farm Grading and Drainage

New York City.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

Bids: Feb. 3.

Reinforced Concrete Bridge

Arcadia, Fla.

Sealed proposals on blank form furnished by the Board and addressed to the Board of County Commissioners of De Soto County, Fla., at Arcadia, Fla., will be received until 12 o'clock M. of February 3rd, 1919, for furnishing material, equipment, labor and constructing in Charlotte Harbor Special Road and Bridge District of De Soto County, across Charlotte Harbor, between the towns of Charlotte Harbor and Punta Gorda, the following:

Approximately 3000 lineal feet of reinforced concrete bridge; rubbing and finishing 1400 lineal feet of reinforced bridge, now partially constructed, and completing causeway construction, now partially completed.

Bridge to be monolithic beam and slab structure supported on concrete piles, and causeway to be hydraulic fill protected by reinforced concrete sheet piling.

Each bid is to be accompanied by a certified check, made payable to the Chairman of the Board for two thousand dollars.

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the office of the County Clerk at Arcadia, Fla., and specifications can be obtained by writing the engineer at Box 421, Atlanta, Ga.

A. L. DURRANCE, Clerk.
Arcadia, Fla.

E. V. CAMP, Engineer,
Box 421, Atlanta, Ga.

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

Bids: Feb. 8.

Concrete Sewer

Granite City, Ill.

Bids will be received by the Board of Local Improvements of the City of Granite City, Illinois, at the hour of Two o'clock P.M., February 8th, 1919, at the City Hall in Granite City, Illinois.

Estimated 18,000 lin.ft. of concrete sewer from Nine (9) feet diameter to Three feet Six inches (3' 6") diameter.

Specifications, plans and estimated may be seen at the office of Edmund Hall, Engineer, First National Bank Building, Granite City, Illinois.

Bids: Feb. 4.

Courthouse Bonds

NOTICE OF BOND SALE

Lusk, Wyoming.

Public notice is hereby given that the Board of County Commissioners of Niobrara County, in the State of Wyoming, intends to issue and negitiate the Courthouse Bonds of said County, in the aggregate amount of Sixty Thousand Dollars ($60,000) to provide means for the construction of a courthouse and for the necessary furnishings and equipment of the same in and for the county. Said bonds will be issued in conformity with the provisions of an order and resolution adopted and approved January 8, 1919 ,and pursuant to the approval of more than a majority of the qualified electors of said county, voting upon the question at the regular election for electing county officers held in said county on Tuesday, the 5th day of November, A. D. 1918.

Said bonds will bear date the first day of February, A. D. 1919, will be payable at the option of the County ten (10) years after date and absolutely due and payable twenty (20) years after date. Said bonds will be issued in the denomination of One Thousand Dollars ($1000) each. The principal of said bonds and the interest thereon will be payable at the banking house of Kountze Brothers in the City of New York, State of New York, U. S. A. Said bonds will bear interest at a rate not exceeding six per centum (6%) per annum, payable semi-annually, on the 1st day of August and the 1st day of February in each year.

The Board of County Commissioners of said Niobrara County will on Tuesday, the 4th day of February, A. D. 1919, at the hour of two o'clock P.M., receive sealed bids for said bonds at the office of said Board in Lusk, Wyoming.

All bids must be accompanied by a certified check, payable to the order of the County Treasurer, equal in amount to ten per cent. (10%) of the face value of the bonds bid for. Bidders shall state the rate of interest, (not exceeding six per cent. (6%) per annum) on which their bids are based.

After ascertaining the best terms upon and the lowest interest at which said bonds can be negotiated, the bonds will be sold, but in no case for less than their full or par value and the accrued interest thereon at the time of their delivery.

THE BOARD OF COUNTY COMMISSIONERS OF NIOBRARA COUNTY,
WYOMING
By E. G. JONES,
Chairman.

ATTEST:
A. L. MILLER,
Clerk.
(SEAL)

Bids' Feb. 20.

Road Improvements

Hamlin, W. Va.

Sealed proposals will be received by the County Court of Lincoln County, at Hamlin, West Virginia, until 12 o'clock noon, February 20th, 1919, for the improvement of the following roads:

1. Hard surfacing of a portion of the Hamlin-West Hamlin road, beginning at the upper school house on Two Mile Creek or Station 196, plus 50 and extending to the East end of the West Hamlin bridge or Station 292 plus 93. Width 14 ft.

2. Hard surfacing of a portion of the Hamlin-Griffithsville road, beginning at the intersection of Main and Lynn streets in the town of Hamlin, or station 0 plus 00 and extending toward Griffithsville 6½ miles or to station 343 plus 20. Width 14 ft.

3. Hard surfacing of a portion of the Mud River road, beginning at the intersection of the Hamlin-West Hamlin road or 0 plus 00 and extending up main Mud River three miles or to station 158 plus 40. Width 14 ft.

4. Grading of a portion of the main Mud River road, beginning at the end of Adkins & Adkins contract and extending to the east end of the Palermo Bridge, approximately three miles.

5. Grading a portion of the Valley Fork road beginning at the Oil Field National aBnk in the town of Griffithsville or at Station 0 plus 00 and extending up Valley Fork, a distance of three miles or to station 158 plus 40.

6. Grading of a portion of the Alum Creek-Griffithsville road, beginning at the South end of the Alum Creek bridge over Coal River, or at station 0 plus 00 and extending up Fuquays Creek a distance of four miles or to station 211 plus 20.

7. Grading of a portion of the Hamlin-Huntington road, beginning at the intersection of the Hamlin-West Hamlin road near West Hamlin or at station 0 plus 00 and extending toward Huntington to the intersection of the Lincoln-Cabell county line, a distance of 3 miles or to station 158 plus 50.

8. Grading of a portion of the Guyan River road, beginning at the intersection of the Hager & Hager contract at the mouth of [illegible] Mile Creek and extending to Ranger, approximately three miles.

Plans and specifications can be seen in the office of T. J. Bartrug, Engineer, Hamlin, W. Va.

Check of $100.00 per mile on grading will be required as a guarantee of good faith: $500 per mile on hard surface.

All bids to be made upon blank forms furnished T. J. Bartrug, Engineer.

The County Court reserves the right to reject any and all bids.

ALBERT F. BLACK,
Clerk County Court Lincoln, West Virginia.

Bids: Feb. 10.

County Road Work

FAYETTE COUNTY WEST VIRGINIA

Fayetteville, West Va.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until 2 P.M., February 10th, 1919, for the grading of two (2) sections of county highway aggregating 16 miles and for he grading and paving of one section of 14.0 miles.

Bids will be received for Portland cement concrete bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank form contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any or all bids.

J. K. McGRATH,
Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY,
President.
R. J. STEGALL,
Clerk.

Bids: Feb. 11.

Concrete and Steel Bridge

Oglethorpe, Ga.

Proposals will be received by Commissioners of Macon County, Ga., at Oglethorpe, on February 11, 1919, for furnishing material and erecting a bridge over Flint River. The work is divided into three contracts. Bids will be received on any or all of the contracts.

Contract No. 1 consists of 4 reinforced concrete piers, approx. 3600 lin.ft. of wood piling; 3 steel spans, 120 ft. center to center of pins with concrete floor.

Contract No. 2 consists of 1540 lin.ft. of reinforced concrete approach, 4 concrete abutments and approx. 4000 lin.ft. of wood piling.

Contract No. 3 consists of 54,000 cu.yd. of earth fill and 10 acres of clearing and grubbing.

Plans and specifications may be obtained from Garrett & Slack, engineers, Montgomery, Ala., for price of blue printing.

Certified check of $8000 for each contract.

(By) A. H. PERRY,
Clerk, County Commissioners Macon County, Ga.

GARRETT & SLACK,
Engineers.

Pier and Harbor Improvements

Proposals are asked by a foreign city for harbor construction estimated at $20,000,000. Contractors experienced in actual important works of this character are invited to address the advertiser, an American trading company having an established branch at the foreign city, with a view to coöperating to mutual advantage in obtaining the contract. CL-515, Eng. News-Record.

DEPARTMENT OF THE INTERIOR, United States Reclamation Service, Denver, Colo., January 15, 1919. Sealed proposals will be received at the office of the United States Reclamation Service, Tramway Building, Denver, Colorado, until 2 o'clock p.m., Feb. 10, 1919, and will at that hour be opened, for furnishing 50,000 barrels of Portland cement, f.o.b. cars at the works of the bidder. For particulars address the U. S. Reclamation Service, Washington, D. C., or Denver, Colo. F. E. Weyomuth, Chief of Construction.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

PROPOSALS FOR DREDGING: U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 m., Jan. 28, 1919, and then opened, for dredging in Key West Harbor. Further information on application.

Proposals for Jetty Work.—U. S. Engineer Office, Dallas, Tex.—Sealed proposals will be received here until 11 a.m., Feb. 25, 1919, and then opened, for jetty work at Sabine Pass, Tex. Further information on application.

CONTRACTORS!
GET YOUR
BOND
promptly—no delays—I present your case fully —no extra charge.
Engineering Insurance Service
Phone or Wire HARMON V. SWART
19 Liberty Street, New York

Federal Government Work (Continued)

★Idaho, Boise—Irrigation—U. S. Recl. Serv., Boise, let contract building 9 mi. earth canal on Black Canyon extension of Boise project, to S. C. Comerford Constr. Co., Boise. About $67,682. Plans include 190,000 cu.yd. excav., 178,000 cu.yd. dry earth excav., 5000 loose dry rock excav., 7000 solid dry rock excav., etc. Noted Jan. 9.

Cal., Bakersfield—Post Office—J. A. Wetmore superv. archt., Treas. Dept., Wash., D. C., received bids Jan. 6 (work complete using limestone) from McLeran & Peterson, Sharon Bldg., San Francisco, $149,604; Campbell Bldg. Co., Newhouse Bldg., Salt Lake City, Utah, $149,906; F. Gallagher, San Francisco $158,100. Noted Dec. 5.

★Cal., Inglewood—Cottages and Sewer System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building double cottages, one 4 room cottage and sewer system to connect with Los Angeles city sewer, to Barrell Condler Co., 520 March Strong Bldg., San Francisco, $18,320 (60 days). Noted Jan. 23.

★Cal., Mare Island (Vallejo P. O.)—Repairing Radio Station, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract painting towers, replacing present power house by building combination operating and power house, building cottage, installing concrete cesspool and sewerage ejector, to C. J. W. Koenig, 520 Church St., San Francisco, $13,753, (60 days). Noted Jan. 16.

★Cal., South San Francisco—Repairing Radio Station, etc. — Mare Island Navy Yard let contract clipping and painting towers and repairing 1 broken tower, minor repairs to operating house, building 2 double cottages for operators, building 4 room cottage and providing suitable sewer system and connecting same to city sewer, to C. J. W. Koenig, 520 Church St., San Francisco, $15,992, (60 days). Noted Jan. 16.

Miscellaneous

PROPOSED WORK

Dock and Harbor Improvements—Portland Me.—City having preliminary plans prepared building dock and improving harbor. Fay, Spofford & Thorndike, 308 Boylston St., Boston, engrs.

Ventilation—Boston, Mass.—State Legislature asked to appropriate $42,000 to improve ventilation of Senate and House Chambers, on Beacon St.

Dam—Quincy, Mass., (Boston P. O.)—A. Nelson, representative, petitioned State Legislature, to direct Metropolitan Park Comn., 18 Tremont St., Boston, to build dam across Black's Creek, with or without tide gate. Cost will exceed $10,000.

Heating Lines, etc.—Albion, N. Y.—Bd. Dirs., State Home of Refuge for Women, applied to State Legislature, Albany, for appropriation of $10,000 for new heating line and equipment and $10,000 for covering steam and mains.

Electric and Heating Systems, etc.—Bath, N. Y.—Bd. Dirs. New York State Soldiers and Sailors Home, applied to State Legislature, Albany, for appropriation of $24,000 for installing electric system including a. c. generator engine, switchboard, voltage regulator, etc., and $89,200 for heating system consisting of 4 boilers, underground heating line, hot water plant and underground connections to buildings.

Laundry Equipment, etc.—Binghamton, N. Y.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $15,000 for laundry equipment and $30,000 for coal and ash conveyor, to be installed in State Hospital here.

Docking Facilities — Carthage, N. Y. — Chamber of Commerce plans to expend about $30,000 for dooking facilities on Black River Canal as soon as repairs are completed.

Boilers, Piping, etc.—Central Islip, N. Y.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $100,000 for new boilers and piping and $30,000 for laundry machinery, at Central Islip State Hospital.

Fence and Gate House—Hudson, N. Y.—Bd. Dirs. New York State Training School for Girls, applied to State Legislature, Albany, for appropriation of $25,000 for fence and entrance gate house.

Improving Heating System—Industry, N. Y.—Bd. Dirs. New York State Industrial School applied to State Legislature, Albany, for appropriation of $20,000 to improve heating system here.

Heating Mains—Newark, N. Y.—Bd. Dirs. New York State Custodial Asylum for Women applied to State Legislature, Albany, for appropriation of $10,000 to install low pressure heating main through tunnel.

Increasing Boiler Capacity—Ogdensburg, N. Y.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $65,000 to increase boiler capacity at St. Lawrence State Hospital here.

Refrigerating Apparatus—Ossining, N. Y.—State Prison Comn., Albany, applied to State Legislature for appropriation of $20,000 for new refrigerating apparatus to be installed in Sing Sing prison here.

Automatic Sprinkler System—Rochester, N. Y.—State Hospital Comn., Albany, applied to State Legislature, for appropriation of $35,000 to install an automatic sprinkler system in Rochester State Hospital.

Mechanical Stoker and Weighing Outfit—Rome, N. Y.—Bd. Dirs. New York State Custodial Asylum, applied to State Legislature, Albany, for appropriation of $10,000 to install mechanical stoker and weighing outfit for coal here.

Retaining Wall—Sonyea N. Y.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $15,000 to build retaining wall on west side of Kishaqua Creek for Craig Colony for Epileptics.

Laundry Machinery—Wards Island, N. Y.—State Hospital Comn., Albany, applied to State Legislature for appropriation of $50,000 to install laundry machinery in Manhatten State Hospital here.

Dam, etc.—Watertown, N. Y.—City had plans and estimates prepared by T. Tomlines, engr., City Bank Bldg., Syracuse, for development of power at Diamond Island site, Black River. Plans include construction of concrete dam, power house and tailrace. Total cost $600 000. About $170,000 available.

Grandstand and Stadium—Johnstown, Pa.—City Planning Comn. having plans prepared, rein-con. About $100,000. L. J. Buettrier, secy. C. H. Stroup, supt. parks and pub. impvts.

Park Improvements — Ft. Lauderdale, Fla.—City plans election to vote on $20,000 bonds for park improvements. H. C. Davis, city engr.

Sea Walls—Ft. Lauderdale, Fla.—City plans election to vote on $20,000 bonds to build sea walls along river front. H. C. Davis, city engr.

Wharf and Docks—Pascagoula, Miss.—City plans to build 800 ft. wharf, with warehouses and railroad tracks and loading and unloading facilities, for exports and imports by water and rail. About $75,000. F. H. Lewis, mayor.

Underpasses — Cincinnati, O. — Comrs. Hamilton Co. plan to build 2 concrete and steel underpasses at Red Bank and Linwood and viaduct over yards at Cleveland, Cincinnati, Chicago & St. Louis R.R. at Sharonville, provided half of expense be borne by railroads. About $500,000. W Boeh, co engr.

Dam—Chippewa Falls, Wis.—Wisconsin Minnesota Light & Power Co. plans to build dam. About $400,000.

Dam—Elkhorn, Wis.—Consumers Ice Co., 111 West Washington St., Chicago, plans to build concrete and steel dam at Lake Como here. S. W. Streeter, supt.

Road Machinery—Kenosha, Wis.—Comrs. Kenosha Co. plan to purchase road machinery. About $10,000. J. J. Barrows, Somers, chn.

Dike—Kansas City, Mo.—City had plans prepared for diking Missouri River from Grand Ave. to Blue River. About $500,000. R. W. Waddell, city engr.

Removing Telephone and Telegraph Wires—St. Louis, Mo.—Southwestern Bell Telephone Co., 4th and Locust Sts. and Kinloch Telephone Co., 10th and Locust Sts., soon receive bids removing 4 mi. overhead telephone and telegraph wires and putting same underground. Work involves excavating Page Blvd. from Whittier to Pendleton Ave. and from Newstead to Taylor Aves., Kings Highway from Easton to Natural Bridge Aves., Magnolia Ave. from Grand Ave. to Kings Highway, De Tonty St. from Grand to Spring Aves. and from Klemm St. to Tower Grove Ave., West Pine Blvd. from Grand to Spring Aves., Shenandoah Ave. from Grand to Spring Aves. and De Baliviere Ave. from Delmar Blvd. to Lindell Blvd. About $100,000.

Machinery—Snyder, Tex.—Comrs. Scurry Co. plan to purchase 13 graders and 100 plows for road work.

Cemetery Improvements—Salt Lake City, Utah—City plans to improve cemetery including main drive. About $30,000. S. Q. Cannon, engr.

Park—Salt Lake City, Utah—City plans to build new park on west side. About $25,000. S. Q. Cannon, city engr.

Dam—Bakersfield, Cal.—See "Industrial Works."

Dam—Modesto, Cal.—A. J. Wiley, consult. engr., Boise, Idaho, submitted reports, estimates and recommendations on Don Pedro dam project to Bd. Dirs. Modesto and Turlock Irrigation Dists. Plans include construction of concrete arch dam, 279 ft. high, 177 ft. wide at base, 16 ft. wide at top, 4 mi. above La Grande dam cost, $2,787,000; 8 mi. railway from Rosasco to dam site, $93,000; building hydro-electric plant to develop 16,000 h.p. or 12,000 k.w. below dam, $609,000. Modesto Irrigation Dist. plan to vote $1,000,000 bonds and Turlock Irrigation Dist., $2,000,000.

Harbor Improvements—Newport Beach, Cal.—City election Feb. 25, to vote on $65,000 bonds for additional harbor work including dredging 200 x 1000 ft. turning basin in addition to channel now being dredged. P. Kressly, city engr.

Harbor Improvements—Newport Beach, Cal.—Orange Co. Harbor Comn., Santa Ana, will petition Bd. Supervs. to call election to vote on $500,000 bonds for improving Newport Beach harbor.

Dam—San Diego, Cal.—City directed H. N. Savage, city hydraulic engr., to prepare estimate of cost of building Barrett dam. Mayor recommended that $100,000 be appropriated for preliminary work. Total cost, $300,000.

Transmission Lines—Tulare, Cal.—Mt. Whitney Power & Electric Co., 215 West Main St., Visalia, plans to extend lines to farmers pumping plants here, cost, $60,000; convert lines, from 2 phase, 6000 volts, into 3 phase, 11,000 volts, $1700; installing one 500 kw., 11,000 volt transformer and one 300 kw., 200 volt transformer in substation, $5000. F. G. Hamilton, Visalia, supt. west. div.

BIDS DESIRED

Refrigeration Equipment — Iroquois, N. Y.—Until Feb. 13, by W. Hunt, pres. bd. mgrs., Thomas Indian School, installing refrigeration equipment in school here. About $10,000.

Chlorine, etc.—New York, N. Y.—Until Feb. 5, by N. J. Hayes, comr. water supply, gas and electricity, furnishing and delivering liquid chlorine and chloride of lime.

Refined Asphalt, Etc.—Montclair, N. J.—Until Feb. 13, by Town, furnishing refined asphalt and tar for use on macadam pavements; also for road oil asphaltic, nonasphaltic and refined tar. H. Trippett, clk.; advertised in this issue.

Crib—Casper, Wyo.—Until Feb. 3, by C. B. Bryan, city clk., building timber and stone crib to protect east bank of Platte River pumping station. A. W. Wheeler, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Dry Dock—Pensacola, Fla.—Bruce Dry Dock Co., South Coyle St., will build 5,000,000 ton steel and timber floating dry dock. Work will be done by day labor. Noted Jan. 16.

★Levee—Sandy Hook, Mo.—Moniteau Co. let contract building 250,000 cu.yd. levee, to Pope Constr. Co., Jefferson City, $52,188.

★Shipping Gallery—St. Louis, Mo.—J. H. Teasdale Com. Co., Merchants Exchange Bldg., let contract building 12 x 35 x 362 ft. timber shipping gallery encased in sheet iron supported by concrete piers at 917 South Wharf St., to J. Stewart & Co., Boatmen's Bank Bldg. About $12,000.

Fill—Seattle, Wash.—Bd. Pub. Wks. received bids Jan. 17, filling and bulkheading land in Elliott Ave., Sanitary Fill No. 1, from Swennson & Co., Arcade Bldg., $134,536; Fiorito Bros., Arcade Bldg., $143,222; Tacoma Dredging Co., Natl. Bank of Tacoma Bldg., Tacoma, $149,217.

★Wharf, etc. — Seattle, Wash. — See "Streets & Roads".

★Pavilion—Kitchener, Ont.—Dept. Pub. Wks. Ottawa, let contract building pavilion, to W. H. Dunker, Louisa St. About $12,000.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: Feb. 18 & 19.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, February 18, 1919, at which place and hour they will be publicly opened and read, for the improvement of the State canals as authorized by Chapter 147 of the Laws of 1903 and amendatory laws, and Chapter 391 of the Laws of 1909; and for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, as follows:

TERMINAL CONTRACT NO. 57

For constructing certain parts of an approach from Court Street and South Avenue to the Barge canal terminal at Rochester.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 69

For protecting the shore of Erie Basin between Lake Street and Slip No. 1, at Buffalo.

Contract plans, sheets 1 and 2.

TERMINAL CONTRACT NO. 107

For installing electric wiring, lighting, power and battery charging equipment for the canal terminal at Erie Basin, Buffalo.

Contract plans, sheets 1 to 10 inclusive.

TERMINAL CONTRACT NO. 223

For constructing a Barge canal terminal freight-shed at Greenpoint, Brooklyn, New York City.

Contract plans, sheets 1 to 11 inclusive.

And until twelve o'clock noon of Wednesday, February 19, 1919, for the following pieces of work:

CONTRACT NO. 200

Erie Canal—Sections 9 and 10

For driving steel sheet piling, placing concrete lining and incidental work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

CONTRACT NO. 201

Erie Canal—Section 9

For completing the concrete prism lining at Cartersville and constructing a stream entrance near Knapp's bridge.

Sheets 1 to 3 inclusive.

CONTRACT Q

Cayuga and Seneca Canal—Section 1

For constructing pile dolphins for aids to navigation on Cayuga and Seneca lakes.

Sheets 1 to 5 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at the office of the State Engineer and Surveyor.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90%) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5%) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20%) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10%) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

OFFICIAL PROPOSALS

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

January 15, 1919.

Bids: Feb. 14.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS
AND FERRIES

550 Bourse Building, Philadelphia.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Kenilworth Street Pier, No. 30 South Delaware Wharves," will be received until 12 o'clock noon, Friday, February 14, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of twenty five dollars ($25.00), to cover the cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition, and unmarked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Ace of June 18, 1917, relative to workingmen's compensation, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance requiring proposal bonds on all bids exceeding in amount $500, approved May 25, 1860, have been complied with.

The Director reserves the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

January 18, 1919.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Baltimore, Md., at 2 o'clock P.M., March 1, 1919, for construction of concrete foundation and placing of rip rap at Tangier Sound Light Station, Va. Information upon application to the above office.

Bids: Feb. 25.

Water Purification Plant

East Chicago, Ind.

1. Sealed proposals for the construction of a Water Purification Plant in the City of East Chicago, Indiana, addressed to C. L. Kirk, Vice-President of the East Chicago & Indiana Harbor Water Company, and endorsed proposal for Water Purification Plant, will be received at the office of the Indianapolis Water Company, 113 Monument Circle, Indianapolis, Indiana, until 12 o'clock noon, Tuesday, February 25, 1919, at which place and time said proposals will be publicly opened and read.

2. All bids must be upon blank forms furnished by the East Chicago & Indiana Harbor Water Company, hereinafter referred to as the owner, and should give a price for each item of work proposed, both in words and figures, and be signed by the bidder with his business address and place of residence.

3. Each bid must be accompanied by a certified check of two thousand five hundred dollars ($2500), payable to the order of the East Chicago & Indiana Harbor Water Company, inclosed in the sealed envelope containing the bid. All checks of unsuccessful bidders will be returned within three days after bids have been received. If all bids are rejected, all checks will be returned forthwith.

4. A bond in the sum of fifty thousand dollars ($50,000) with a surety company satisfactory to the owner as surety, will be required for the faithful performance of the contract, the name of the company to be offered to be designated in the proposal.

5. The successful bidder to whom the contract shall be awarded by the owner shall within fifteen days, not including Sundays and holidays, after the awarding of the contract enter into a contract and furnish bond duly executed with a satisfactory surety company. Should the bidder to whom the contract is awarded fail to enter into the contract and to furnish bond within the time specified, the proposal and acceptance shall be null and void and the certified check accompanying the proposal shall be forfeited to and shall be retained by the owner as liquidated damages for such failure and neglect and to indemnify the owner for any loss which may be sustained by failure of the bidder to execute the contract and to furnish the bond as aforesaid.

6. The specifications for the work provide that the owner will pay monthly estimates of eighty-five (85) per cent of the contract price of such part of the work completed during the previous month.

7. The specifications for the purification plant covers the construction of a chemical house, filter house, boiler house and pumping plant addition, sedimentation basins and filtered water reservoir. In order to give any one desiring to bid an idea as to the scope of the work, the following approximate quantities of the principal items entering into the construction of the purification plant are given:

Excavation	16,000 cu.yd.
Concrete	6,600 cu.yd.
Loam furnished	2,300 cu.yd.
Reinforcing steel	140 tons

The handling and setting of 218 tons of cast iron pipe.

The handling and setting of 72 tons of gate valves and sluice gates. In the above items the material entering into the construction of the super-structure of the chemical house, filter house, boiler house addition and pumping station addition are not included.

8. Bids will be received on all items mentioned in the Specifications as per plans and specifications prepared by Metcalf & Eddy, Consulting Engineers, and on alternate plans for the sedimentation basin and filtered water basins prepared by the engineer of the East Chicago & Indiana Harbor Water Company. The owner reserves the right to let a contract for the entire work covered by the plans and specifications or for only a part of the work, which part will include the construction of the sedimentation and filtered water basins, the foundations of the chemical house and filter house, the construction complete of the boiler house and pumping station additions, and the construction of sewers and drains, but will exclude the construction of the super-structure of the chemical house and filter house, the handling and setting of cast iron pipe, gate valves and sluice gates, and other work more specifically enumerated in the specifications.

9. Detail contract drawings, form of contract and specifications may be examined at the office of the East Chicago & Indiana Harbor Water Company, 4735 Olcott Avenue, East Chicago, Indiana, and at the office of the Indianapolis Water Company, 113 Monument Circle, Indianapolis, Indiana. Plans and specifications may be obtained from B. J. T. Jeup, Chief Engineer Indianapolis Water Company, provided a deposit of fifty dollars ($50) is made. The said deposit will be returned upon return of plans and specifications. The bidder must return the said plans and specifications to the owner on or before February 25, 1919.

10. The owner reserves the right to reject any or all bids or to accept a bid deemed to be for the best interests of the owner.

C. L. KIRK,
Vice-President.

113 Monument Circle,
Indianapolis, Indiana,
January 25, 1919.

Bids: Feb. 28.

Addition to Mechanical Filtration Plant

Clarksburg, W. Va.

Sealed proposals for the construction of an addition of 3 m.g.d. capacity to the existing mechanical filtration plant of the City of Clarksburg, W. Va., will be received by the Clarksburg Water Board at their offices until 12 o'clock noon, Feb. 28, 1919.

Proposals shall be made on blank forms to be obtained from the Secretary or the Engineer.

Plans and specifications can be seen at the office of the Water Board, Clarksburg, W. Va., and Fuller & McClintock, Engineers, 170 Broadway, New York City. Copies may be obtained from the latter on deposit of Ten ($10) Dollars.

Each proposal must be accompanied by a certified check payable to the Clarksburg Water Board for One Thousand ($1000) Dollars.

The Board reserves the right to reject any or all bids.

SCOTLAND G. HIGHLAND,
Secretary and General Manager,
Clarksburg Water Board.

FULLER & McCLINTOCK,
170 Broadway,
New York City,
Engineers.

Bids: Feb. 11.

Boilers and Heating Work

Utica, N. Y.

Sealed proposals for new boilers and heating work, boilers and changes to central heating plant, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, February 11, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3142 and 3143. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Bldg., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: January 22, 1919.

Bids: Feb. 6.

Sewerage System Improvement

Syracuse, N. Y.

Sealed proposals for contract No. 27 for the construction of Divisions 3, 4 and 5, Onondaga creek improvement and the main intercepting sewer, will be received until 2 o'clock P.M., February 6, 1919, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y. The work embraces approximately 2 miles of creek improvement and 1.3 miles of intercepting sewer. Proposals may be made under three alternatives which cover the whole or proportions of the work. The principal items of the whole work are 111,500 cu.yd. excavation and 18,000 cu.yd. concrete. This contract is to continue the work started under a contract which was cancelled on account of the war. The Board has in its possession to be used upon the new contract practically all of the reinforced concrete pipe which has been manufactured for the sewer and its lying on the site thereof. The Board also has cast iron siphons, a traveling concrete mixer and 4 flat cars for use upon the new contract. Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York draft or certified check for $5,000 or $10,000 for each division for which a bid is submitted. Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies may be obtained by depositing $10 to insure their return in acceptable condition on or before February 15, 1919.

HARRY J. HAMLIN,
Secretary.

PROPOSALS FOR BOILERS.—Office, Mississippi River Commission, 1st and 2d Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing Boilers for hydraulic grader No. 1820. Further information on application.

Bids: Feb. 17.

Road Work

Tulsa, Okla.

Notice is hereby given that on the 17th day of February, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider the following Tulsa County State Roads.

Miles 1 To 6 Inclusive of Section "Y"
Miles 1 To 2 Inclusive of Section "I"

Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before Two (2) o'clock P.M., of the date above set out. Proposals to be accompanied with a certified check to an amount equal to approximately Ten (10%) per cent. of the sum total of the bid, drawn on a bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 20th day of January, 1919.

BOARD OF COUNTY COMMISSIONERS
OF TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: Feb. 18.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, N. J., Tuesday, February 18, 1919, at 2 P.M., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under the Hackensack and Passaic Rivers, in accordance with plans and specifications, and addenda thereto, on file in the office of the City Clerk of Jersey City, for public inspection.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Consulting Engineer, Laurence A. Ball, Room 23, City Hall, Jersey City. A deposit of $25 must accompany each application for copy of plans and specifications, which deposit will be refunded when plans and specifications are returned to the Consulting Engineer in good condition.

Proposals must be inclosed in sealed envelopes, endorsed "Proposal for Water Main Under Hackensack and Passaic Rivers," directed to this board, and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: City Clerk's Office,
Jersey City, January 24, 1919.

Bids: Feb. 15.

So. Bend, Ind.

Proposals for dredging will be received up to and including Feb. 15th, for the widening of channel in St. Joseph river at South Bend, Ind. For further information write Jos. F. Wagner, 531 Leland Ave., South Bend, Indiana.

Bids: Feb. 13.

Refined Asphalt and Refined Tar

Montclair, N. J.

Sealed bids will be received by the Board of Commissioners of the Town of Montclair, in the County of Essex, for the furnishing and delivery to the Town of Montclair of refined asphalt and refined tar for use in the construction of macadam pavements during the year 1919, in accordance with specifications of the Town Engineer.

Each bidder will be required to use the form of bid on file in the office of the Town Engineer and all bids not made on such form will be rejected.

Each bid must be accompanied by a forfeit of five hundred ($500) dollars to insure the signing of the contract and bond by the successful bidder within two weeks after the award shall have been made.

Approximate quantity of refined asphalt and refined tar required is 100,000 gallons.

The right is reserved to reject all bids.

All bids must be filed with the undersigned not later than four o'clock in the afternoon of Thursday, February 13, 1919, at which time the said Board of Commissioners will meet in the Council Chamber of the Municipal Building to consider the same.

By order of the Board of Commissioners,

HARRY TRIPPETT,
Town Clerk.

Bids: Feb. 20.

Road Improvements

Hamlin, W. Va.

Sealed proposals will be received by the County Court of Lincoln County, at Hamlin, West Virginia, until 12 o'clock noon, February 20th, 1919, for the improvement of the following roads:

1. Hard surfacing of a portion of the Hamlin-West Hamlin road, beginning at the upper school house on Two Mile Creek or Station 196, plus 50 and extending to the East end of the West Hamlin bridge or Station 292 plus 93. Width 14 ft.

2. Hard surfacing of a portion of the Hamlin-Griffithsville road, beginning at the intersection of Main and Lynn streets in the town of Hamlin, or station 0 plus 00 and extending toward Griffithsville 6½ miles or to station 343 plus 20. Width 14 ft.

3. Hard surfacing of a portion of the Mud River road, beginning at the intersection of the Hamlin-West Hamlin road or 0 plus 00 and extending up main Mud River three miles or to station 158 plus 40. Width 14 ft.

4. Grading of a portion of the main Mud River road, beginning at the end of Adkins & Adkins contract and extending to the east end of the Palermo Bridge, approximately three miles.

5. Grading a portion of the Valley Fork road beginning at the Oil Field National aBnk in the town of Griffithsville or at Station 0 plus 00 and extending up Valley Fork, a distance of three miles or to station 158 plus 40.

6. Grading of a portion of the Alum Creek-Griffithsville road, beginning at the South end of the Alum Creek bridge over Coal River, or at station 0 plus 00 and extending up Fuquays Creek a distance of four miles or to station 211 plus 20.

7. Grading of a portion of the Hamlin-Huntington road, beginning at the intersection of the Hamlin-West Hamlin road near West Hamlin or at station 0 plus 00 and extending toward Huntington to the intersection of the Lincoln-Cabell county line, a distance of 3 miles or to station 158 plus 50.

8. Grading of a portion of the Guyan River road, beginning at the intersection of the Hager & Hager contract at the mouth of Ten Mile Creek and extending to Ranger, approximately three miles.

Plans and specifications can be seen in the office of T. J. Bartrug, Engineer, Hamlin, W. Va.

Check of $100.00 per mile on grading will be required as a guarantee of good faith; $500 per mile on hard surface.

All bids to be made upon blank forms furnished T. J. Bartrug, Engineer.

The County Court reserves the right to reject any and all bids.

ALBERT F. BLACK,
Clerk County Court Lincoln, West Virginia.

Bids: Feb. 10.

County Road Work

FAYETTE COUNTY WEST VIRGINIA

Fayetteville, West Va.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until 2 P.M., February 10th, 1919, for the grading of two (2) sections of county highway aggregating 16 miles and for he grading and paving of one section of 14.0 miles.

Bids will be received for Portland cement concrete bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank form contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any or all bids.

J. K. McGRATH,
Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY,
President.
R. J. STEGALL,
Clerk.

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

OFFICIAL PROPOSALS

Bids: Feb. 12.

Furnishing Valves

Baltimore, Md.

Sealed proposals, in duplicate, addressed to the "Board of Awards" of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon Wednesday, February 12th, 1919, for furnisihng and delivering valves to the Water Department, Baltimore, Maryland.

Specifications and Proposal Forms may be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after February 1, 1919. A charge of $5.00 will be made for each set of specifications. This amount will be refunded upon their return on or before February 19th, 1919, in good condition. Specifications used in making a bid will be considered as returned.

All bids must be accompanied by a certified check of the bidder upon a clearing house bank, in the amount recited in the specifications, drawn to the order of the Mayor and City Council of Baltimore, Md. The successful bidder will be requested to give satisfactory bond for the faithful per formance of the agreement, equal in amount to the value of the contract.

The Board of Awards reserves the right to reject any or all bids.

WALTER E. LEE,
ater Engineer.W

Approved:
JAMES H. PRESTON,
Pres. Board of Awards.

Bids: Feb. 14.

Sanitary Trunk Sewer

Canton, Ohio

Sealed proposals will be received by the Director of Public Service, Canton, Ohio, until 12 o'clock noon Central Standard Time, February 14, 1919, for furnishing labor and materials required for the construction of three sections of the East Side Intercepting Sewer, according to plans and specifications on file in the Director's office.

Length of Section No. 1, 7965 feet—brick, segment block or reinforced concrete pipe.

Length of Section No. 2 5193 feet—brick, segment block or reinforced concrete pipe.

Length of Section No. 3 1050 feet—Vitrified Pipe, segment block or reinforced concrete pipe.

Copies of plans and specifications can be had from the Director by depositing $10, which deposits will be returned on return of same in good condition, or upon filing of bids.

Bids must be made upon the forms included in said specifications. Each bid must be accompanied by a certified check or a bond satisfactory to the Director in the sum of 5% of the total amount of bid. The Director reserves the right to reject any or all bids received and to accept any of which he may deem most favorable to the interests of the City of Canton, Ohio.

FRANK L. DE CORPS,
Director of Public Service.
W. E. SARVER,
City Civil Engineer.

PROPOSALS FOR TURBINES, PUMP SET, FEED WATER HEATER, AND ELECTRIC LIGHT PLANT.—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn. Sealed proposals will be received here until 11 a.m., Feb. 4, 1919, and then opened, for furnishing turbines, pump set, feed water heater, and electric light plant, for hydraulic grader No. 1820. Further information on application.

OFFICIAL PROPOSALS

Bids: Feb. 13.

Road Oils

Montclair, N. J.

Sealed bids will be received by the Board of Commissioners of the Town of Montclair, in the County of Essex, for the furnishing of the necessary road oil asphaltic, non-asphaltic and refined tar for use of the Town of Montclair during the year 1919, in accordance with the specifications of the Town Engineer.

Each bidder will be required to use the form of bid on file in the office of the Town Engineer and all bids not made on such form will be rejected.

Each bid must be accompanied by a forfeit of three hundred ($300) dollars to insure the signing of the contract and bond by the successful bidder within two weeks after the award shall have been made.

Approximate quantity of road oil required is 50,000 gallons.

The right is reserved to reject all bids.

All bids must be filed with the undersigned not later than four o'clock in the afternoon of Thursday, February 13, 1919, at which time the said Board of Commissioners will meet in the Council Chamber of the Municipal Building to consider the same.

By order of the Board of Commissioners,

HARRY TRIPPETT,
Town Clerk.

Bids: Feb. 24.

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Norfolk, Va.—Sealed proposals will be received here until 12 o'clock, noon, February 21, 1919, and then opened, for dredging anchorage and 40-foot channel, and constructing bulkhead. Further information on application.

OFFICIAL PROPOSALS

Farm Grading and Drainage

South Carolina.

Bids invited on the development of one thousand acres of former rice field in South Carolina. The spoil banks of recently completed drainage canals are to be removed and spoil deposited in abandoned open ditches, also old rice field banks are to be cut down and spoil used to fill old ditches. After land has been graded, it is to be tile drained. A keystone steam shovel, half mile of portable track, dump cars and Buckeye Tile Ditching Machine now on job for contractor's use.

Bid to be on cubic yard basis for moving spoil and banks and per lineal foot basis for laying tile.

Only thoroughly reliable contractors who are experienced in this class of work will be considered, which experience outline fully when writing. Write,

G. C. BURLINGAME,
150 Nassau Street,
New York City.

Bids: Feb. 5.

Construction of Dam.

City of Winston-Salem, N. C.

Sealed proposals for the construction of a concrete dam across Salem Creek containing approximately 8000 cu.yd. of concrete will be received by the City of Winston-Salem up to four o'clock P.M. of the 5th day of February, 1919. Proposals to be addressed to Commissioner of Public Works, and endorsed "Proposals for Dam."

Plans may be seen and specifications and blank forms of proposal may be obtained at the office of the Commissioner of Public Works.

A certified check equal to 5% of the amount of the bid and made payable to the Treasurer of the City of Winston-Salem will be required to accompany each bid.

The right is reserved to reject any or all bids.

JOSEPH FIRTH,
Com. Pub. Works.

SALE OF GOVERNMENT OWNED BAGS. The Surplus Property Division, Munitions Building, 19th & B Streets, Washington, D. C., will receive bids on Nose Bags also known as Feed Bags, that were manufactured for the Government as army equipment. No bids will be accepted for less than a bale lot which contains 50 bags each. Bids will be made in triplicate form and must be mailed in time to reach Washington for the opening at 2:00 P.M., March 3rd, 1919. Full particulars and form for submitting bids may be obtained upon application to Surplus Property Division, Munitions Building, Washington, D. C., Ref. S. P. D. No 320, C & E.

Contractors!
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BOND
promptly—no delays—I present your case fully—no extra charge.
Engineering Insurance Service
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19 Liberty Street, New York

POSITIONS VACANT

A GROWING construction company looking for an exceptional young man who is not an experiment but a successful timekeeper, material man, paymaster and field office manager, will find this man available in 30 days. Prefer young company. Location of job no consideration. Address E., Adams Apts., Rock Island, Ill.

BRIDGE designer, experienced in both steel and concrete highway design. Salary $150 per month. Submit sample of work, statement of education, experience, age and date can report. Wyoming State Highway Dept., Cheyenne, Wyo.

CIVIL engineer wanted, technically educated, with practical experience in general city engineering. State age, experience, and salary expected. Massachusetts Civil Service certificate required. Superintendent Public Works, Attleboro, Mass.

DISTRICT engineers wanted with pleasing personality and experience in supervising general construction. Small investment. Address Engineer, 1301-4 Conover Bldg., Dayton, Ohio.

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

DRAFTSMAN and estimator wanted in office of large firm of building contractors. Man who can detail reinforced work and make careful estimates of quantities from plans. State age, education, experience, salary and when available. P-516, Eng. News-Record, Phila.

ENGINEER with operating experience in central station steam heating plants. Must be a technical graduate and qualified to make valuations and determinations of operating costs. P-549, Eng. News-Record, Chicago.

ENGINEER wanted by Eastern construction company, for estimating, laying out, supervising, etc. State experience and what you think you can do and earn. Communications absolutely confidential. P-484, Eng. News-Record.

EXPERIENCED superintendent wanted for construction of concrete roads. Must be competent, able to furnish reference. If not experienced need not apply. State salary expected. Apply to T. J. Bartrug, Engineer, Hamlin, W. Va.

FIRST-CLASS bridge builder wanted. Man experienced in reading plans. To take charge of small but difficult work. Sutton & Corson Co., Ocean City, N. J.

FIRST-CLASS assistant superintendent wanted for water and sewer construction, grading and road building, who is a practical engineer. Sutton & Corson Co., Ocean City, N. J.

MAN wanted with sufficient training and experience, to qualify him to take charge of small machine shop, connected with manufacturing plant, occupied in making and repairing dies and machinery. P-556, Eng. News-Record.

MECHANICAL engineer and estimator wanted, high grade, preferably on steel products, experienced in layout and details of combined tank and structural work. By established manufacturing concern located in city near Texas oil fields. State salary expected and full particulars in first letter. P-413, Eng. News-Record, Chicago.

REINFORCED concrete engineer wanted in office of large firm of building contractors. Man to take charge of the designing, detailing and estimating. Must be familiar with all the modern methods of design. State age, education, salary and when available; give complete account of experience with description of buildings handled. P-517, Eng. News-Record, Philadelphia.

REINFORCED concrete designers and draftsmen for office of engineering contract concern, located in New York City. State qualifications, age, salary etc. P-588, Eng. News-Record

POSITIONS VACANT

SUPERINTENDENT of streets wanted in town near New York, experienced in the construction and maintenance of bituminous macadam streets and with ability to handle work, under the direct supervision of the town engineer. First-class equipment to work with. Salary $150 per month. P-572, Eng. News-Record.

SUPERINTENDENT wanted, small structural shop in Western New York. Must be thoroughly experienced in all branches of this work and capable of handling men to get 100% efficiency. Age, between 30 and 40 years preferred. No application will be considered without detail information as to experience and past record. Reference required. P-557, Eng. News-Record.

STRUCTURAL and plate draftsmen wanted. Must have experience in modern structural and plate shop drafting and practice. P-487, Eng. News-Record.

TECHNICAL engineer-draftsman wanted for mining department of large corporation. Young married man with mechanical mining qualifications preferred. Maintenance and efficiency work with mill experimentation and machine design. Parmanent location northeast. State briefly education, experience and initial salary expected. P-583, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO steam shovel foremen wanted for long job, must have experience with air dump cars. Write giving statement of experience, age, nationality and salary expected. P-565, Eng. News-Record, Chicago.

WANTED on survey and street work, rodman pays $90.00 per month and chainman $75.00. This is on allotment work. Address Goodyear Heights Engineer, 1426 Sprague Street, Akron, Ohio, stating age, experience, references, etc.

YOUNG civil engineers, preferably college graduates, by large new structural steel fabricating plant. These men starting in at the bottom will be advanced as rapidly as the services they render will warrant. A splendid opportunity. Salary to start $100 per month. State age, whether married, education, and past experience, and give references. Birmingham Steel Corporation, Birmingham, Alabama.

ASPHALT PLANT MAN

WANTED

A man competent and experienced in the operation of a small Asphalt Plant in a large Eastern city. Must be familiar with the different asphalt mixes for road construction and repairing. Write, giving full details of experience, references and salary expected.

P579—Eng. News-Record
10th Ave. at 36th St., New York City

We Want the Following Men

Applications should be in writing and accompanied by experience record. Sober and ambitious men only apply. The best are none too good.

FOREMAN for Plate Shop now doing ship work; in ordinary times, general plate work, such as tanks, bins and refinery equipment. Must be a master of most complicated layout and handling men.

INSPECTOR for Structural Shop. Young technical man preferred

SHIPPING CLERK for Fabricating Shop.

Memphis Steel Const. Co. of Penna.
Greensburg, Pa.

SALES MANAGER FOR CONCRETE MIXERS

having broad experience in organizing territory. Must be good correspondent. Desirable position for a man who can fill these requirements. References that will stand the most rigid investigation will be required. State age, experience, salary and references. Address

F. C. AUSTIN COMPANY, INC.
Railway Exchange Bldg., Chicago, Ill

District Manager

We want a high-grade man capable of taking charge of our Chicago District Office on either salary or commission or both. We have a very attractive proposition for the right man who must thoroughly understand the Contractors' Machinery business and come with a clear record and a reputation of having produced the business in whatever locality he has been or is now located.

We invite correspondence.

OSHKOSH MFG. COMPANY
Oshkosh, Wis.

OFFICIAL PROPOSALS

Bids: Feb. 17.

Road Work

Philippi, W. Va.

Sealed proposals for the construction of the following roads addressed to the County Court at Barbour County, West Virginia, and endorsed "Proposal for Construction of Class A Road in Barbour County," will be received by said Court at the office of the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 17th day of February, 1919.

The Fairmont and Beverly Turnpike—Federal Aid Project No. 16—Bituminous macadam: 14 ft. wide, 3.2 miles.

The Junior Road—Bituminous macadam, 14 ft. wide, 2.85 miles.

Plans and specifications may be seen at the office of the said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of the Barbour County Court,
Philippi, W. Va.

Bids: Feb. 10.

County Road Work

FAYETTE COUNTY WEST VIRGINIA

Fayetteville, West Va.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until 2 P.M., February 10th, 1919, for the grading of two (2) sections of county highway aggregating 16 miles and for he grading and paving of one section of 14.0 miles.

Bids will be received for Portland cement concrete bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank form contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any or all bids.

J. K. McGRATH,
Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, **Clerk**.

Bids: March 6.

Road Improvements

Fairmont, W. Va.

Sealed bids will be received until 12:00 o'clock noon, Thursday, March 6, 1919, by the County Court of Marion County, West Virginia, for the construction of approximately six (6) miles of improved roads and streets in Grant District of said Marion County.

A certified check in the sum of Four Hundred Dollars must accompany each bid.

Successful bidders will be required to furnish a bond satisfactory to the County Court.

Plans and specifications for this work are on file in the County Clerk's office, Fairmont, West Virginia.

The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of Marion County.

OFFICIAL PROPOSALS

Bids: Feb. 11.

Boilers and Heating Work

Utica, N. Y.

Sealed proposals for new boilers and heating work, boilers and changes to central heating plant, Utica State Hospital, Utica, N. Y., will be reecived by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, February 11, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3142 and 3143. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Bldg., and at the Department of Architecture. Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: **January 22, 1919.**

Bids: **Feb. 24.**

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va.

OFFICIAL PROPOSALS

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough ofRumson for the permanent improvement of the Rumson Road, in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P. M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 15.

So. Bend, Ind.

Proposals for dredging will be received up to and including Feb. 15th, for the widening of channel in St. Joseph river at South Bend, Ind. For further information write Jos. F. Wagner, 531 Leland Ave., South Bend, Indiana.

Contractors!
Let Me Write
Your Contract Bonds
It's a Good Habit
Get the advantage of a highly specialized
"Engineering Insurance Service"
IT COSTS NO MORE
HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

Bids: Feb. 21.

Cast Iron Water Pipe

City Hall, Bayonne, N. J.

Proposals for bids for the furnishing of **30-in.** cast-iron water pipe, and the laying of the same under and across the Hackensack River, and on the east and west sides thereof, to connect with the pipe lines of the City of Bayonne, and all other work relating thereto.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, February 21, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and opened at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements, dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by prospective bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10) which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up and relaying of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and re-painting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying of about 900 ft. of 18-in. cast-iron water pipe, with necessary valves and appurtenances, and 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above work embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and relaying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said contract, and to protect all persons performing labor or furnissing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price as required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the city that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed. The certified checks of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the city.

By order of the Board of Commissioners of the City of Bayonne.

HORACE ROBERSON,
Director, Department of Revenue
and Finance, Bayonne, N. J.

MORRIS R. SHERRERD,
Consulting Engineer,
20 Clinton St.,
Newark, N. J.
January 31, 1919.

Bids: Feb 1.

Road Work

Tulsa, Okla.

Notice is hereby given that on the 17th day of February, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider the following Tulsa County State Roads.

Miles 1 To 6 Inclusive of Section "Y"
Miles 1 To 2 Inclusive of Section "I"

Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before Two (2) o'clock P.M., of the date above set out. Proposals to be accompanied with a certified check to an amount equal to approximately Ten (10%) per cent. of the sum total of the bid, drawn on a bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 20th day of January, 1919.

BOARD OF COUNTY COMMISSIONERS
OF TULSA COUNTY
By LEWIS CLINE, County Clerk.

OFFICIAL PROPOSALS

Bids: Feb. 11.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—**Additions and Alterations** to Water Supply **System** (Additional Filter, Changing Water **Main and Construction of** Reservoir), **Hudson River State Hospital,** Poughkeepsie, **N. Y., will be received** by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, February **11, 1919,** when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the **contract within thirty** (30) days after official **notice of award** of contract **and in accordance with the terms** of Specifications **Nos. 2923, 2924 and** 2925, and Addenda No. 1 dated January 20, 1919. The right is reserved to reject any **or all bids. Drawings** and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Bldg., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated
January 25, 1919.

Bids: Feb. 14.

Addition to State Armory

Malone, New York.

Sealed proposals for Addition to State Armory—Construction, Heating, Sanitary and Electric Work, Malone, N. Y., will be received by Capt. John A. Coffey, Secretary, State Board of Armory Commissioners, at No. 158 State St., Albany, N. Y., ntil 3 o'clock P.M. on Friday, February 14, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of contract, within thirty days (30) after official notice of award of contract, and in accordance with the terms of Specifications Nos. 3013, 3036, 3037 and 3038, and Addenda No. 1, dated January 27, 1919. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the State Armory, Malone, N. Y., at the Office of the State Board of Armory Commissioners, No. 158 State St., Albany, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: January 29, 1919.

OFFICIAL PROPOSALS

Bids: Feb. 21.

Furnishing Cast Iron Pipe and Special Castings

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATER WORKS IMPROVEMENT
City of Akron, Ohio.
CONTRACT NO. 130

Sealed proposals for Furnishing Cast Iron Pipe and Special Castings will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until twelve o'clock noon, Central Standard time of Friday the twenty-first day of February, 1919, at which time and place they will be publicly opened and read.

The contract includes approximately 210 tons of 16" Class "C" pipe, 65 tons of 12" Class "C" pipe, 5 tons of 12" Class "B" pipe, 80 tons of 10" Class "B" pipe, 70 tons of 8" Class "C" pipe, 10 tons of 8" Class "B" pipe, 55 tons of 6" Class "C" pipe, and 75 tons of 6" Class "B" pipe, with about 15 tons of special castings.

All proposals must be made on the forms furnished by the City.

Each proposal must be accompanied by a satisfactory bond or certified check in the sum of Three Thousand Dollars ($3000.00). A surety bond in the sum of fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Specifications may be seen at the office of the Director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill Street, Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Water Works Superintendent.
G. G. DIXON, Engineer.

Bids: Feb. 20

Oiling

STATE OF MARYLAND, STATE ROADS COMMISSION
Baltimore, Maryland.

Sealed proposals for oiling six sections of State Highways requiring approximately 1,270,664 gallons of oil, as follows:

Division	Miles	Gallons
No. 1—Dorchester, Somerset, Wicomico & Worcester Counties	37.95	69,103
No. 2—Cecil, Kent, Queen Anne's, Talbot & Caroline Counties	81.61	165,796
No. 3—Montgomery, (Part), Harford (Part), Pr. George & Charles Cos.	53.30	109,183
No. 4—Baltimore (Part), Harford & Anne Arundel (Part) Counties	147.33	299,376
No. 5—Carroll, Frederick (Part), Howard (Part), Montgomery (Part) and Baltimore (Part) Counties.	147.89	300,939
No. 6—Garrett, Allegheny, Washington & Frederick (Part) Counties	161.65	326,262
	629.73	1,270,664

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 20th day of February, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications.

OFFICIAL PROPOSALS

Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred ($200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 4th day of February, 1919.

CLYDE H. WILSON, Secretary.
FRANK H. ZOUCK, Chairman.

The right is reserved to increase or diminish the above quantities 10%.

Bids: Feb. 19.

Pipe and Appurtenant Works

Brunswick, Maryland.

Bids received at the office of the mayor and council, Brunswick, Maryland, until 4:30 P.M. February 19, 1919, for furnishing and placing about 26,000 feet of 4 inch to 10 inch wood stave pipe and 8 inch to 10 inch cast iron pipe, including the making of a river crossing and appurtenant work. Plans and specifications can be had at the office of Norton, Bird and Whitman, engineers, 1320 Munsey Building, Baltimore, Maryland, at a charge of $2.50 per set. EUGENE L. HARRISON, Mayor.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 noon, March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging in the Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C. Further information on application.

POSITIONS VACANT

A CAPABLE ENGINEER, experienced in the design of reinforced concrete grain elevators and circular grain bins, is wanted at once by firm of architects and engineers in the West. State experience and salary desired. P-631, Eng. News-Record, Chicago.

CONTRACTOR'S superintendent — Must have broad experience in all branches of contracting. Write experience in detail. P-632, Eng. News-Record, Chicago.

POSITIONS VACANT

DRAFTSMAN wanted for map and construction drawing; state age, whether married or single, and salary considered. Chief Engineer, The Consolidation Coal Co., Jenkins, Ky.

EXPERIENCED superintendent wanted for construction of concrete roads. Must be competent, able to furnish reference. If not experienced need not apply. State salary expected. Apply to T. J. Bartrug, Engineer, Hamlin, W. Va.

GENERAL contractor's office man—Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully. P-616, Eng. News-Record, Chicago.

MAN wanted with sufficient training and experience, to qualify him to take charge of small machine shop, connected with manufacturing plant, occupied in making and repairing dies and machinery. P-556, Eng. News-Record.

MECHANICAL engineer and estimator wanted, high grade, preferably on steel products, experienced in layout and details of combined tank and structural work. By established manufacturing concern located in city near Texas oil fields. State salary expected and full particulars in first letter. P-413, Eng. News-Record, Chicago.

SUPERINTENDENT of streets wanted in town near New York, experienced in the construction and maintenance of bituminous macadam streets and with ability to handle work, under the direct supervision of the town engineer. First-class equipment to work with. Salary $150 per month. P-572, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO steam shovel foremen wanted for long job, must have experience with air dump cars. Write giving statement of experience, age nationality and salary expected. P-565, Eng. News-Record, Chicago.

ASPHALT PLANT MAN

WANTED

A man competent and experienced in the operation of a small Asphalt Plant in a large Eastern city. Must be familiar with the different asphalt mixes for road construction and repairing. Write, giving full details of experience, references and salary expected.

P579—Eng. News-Record
10th Ave. at 36th St., New York City

Applications Wanted for Highway Workers for Spring Work

We expect to need about March 1st men to fill the following positions:

Plant Asphalt Foremen.
Grade Highway Foremen.
Timekeeper for Highway Costs.
High Grade Mechanical Repairmen.
Concrete Foremen.
Highway Road Work Superintendents.
Cooks for Camps.
Street Asphalt Foremen.
Form setters.
Bookkeepers for Highway costs.
Truck Drivers for sand and gravel haul.
Pump engineers for gas and steam.
Sand and Gravel Bunker Foremen.
Concrete Mixer engineers.
Highway Concrete Finishers.

Make applications to

KAISER PAVING COMPANY,
923 Joshua Green Building, Seattle, Wash.

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted
Evening Work Wanted
Vacation Work Wanted
Tutoring
Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted
Agents Wanted
Business Opportunities
Desk Room for Rent
Educational
Employment Agencies
Desk Room Wanted
Foreign Business
Positions Vacant
Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted

Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ad Set in Display Type

(Individual space, within border rules)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space in 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request

For quick and satisfactory results
tell the reader everything that
he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS. do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind" ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave.,	New York
935 Real Estate Trust Bldg.,	Philadelphia
657 Leader-News Bldg.,	Cleveland
1570 Old Colony Bldg.,	Chicago
519 Newhouse Bldg.,	Salt Lake City
501 Rialto Bldg.,	San Francisco

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

POSITIONS VACANT

YOUNG civil engineers, preferably college graduates, by large new structural steel fabricating plant. These men starting in at the bottom will be advanced as rapidly as the services they render will warrant. A splendid opportunity. Salary to start $100 per month. State age, whether married, education, and past experience, and give references. Birmingham Steel Corporation, Birmingham, Alabama.

REINFORCED-CONCRETE contractor in Rocky Mountains wants executive head for construction department; following duties: Daily comparison between actual and estimated costs, development of cost datas, estimating new work, laying out time schedule for labor and material, laying out constructions, plans, keeping Records of tools and equipment. P-688, Eng. News-Record, 519 Newhouse Bldg., Salt Lake City.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

NATIONAL TEACHERS' AGENCY, 6017 Jenkins Arcade, Pittsburgh, Pa. Coöperates with subscribers seeking connections with schools colleges and universities, or with a view of finding some key position in special industries.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

NOW IS THE TIME

to arrange for a course in lettering. Unexampled opportunities for draftsmen. Best equipped man will get to top. Make a success of it by studying with me by mail.

C. W. Reinhardt, Arlington, N. J.
Perspectives, Maps, Commercial Drafting

Freehand Lettering

POSITIONS WANTED

Mechanical and Electrical

MECHANICAL engineer, graduate of a leading university, desires affiliation as a representative of an American company in England or France. Experience in England prior to the war; in France since September, 1917 as artillery officer. Familiar with status in these countries, and compatible with the people. Attended English and French schools; speaks French; 7 years' industrial experience. Age, 28 years. PW-570, Eng. News-Record, Chicago.

ELECTRICAL and mechanical engineer, specialized on industrial plant work; 25 years' experience installing, operating and repairing motors, generators, traveling cranes, elevators, air compressors, pyrometers and lighting; central station and blast-furnace experience; used to handling men and purchasing material; present salary, $2100. Open for position March 1 or earlier. PW-617, Eng. News-Record, Chicago.

POSITIONS WANTED

ARMY officer (captain), 1½ years' foreign service, Coast Artillery, discharged. Graduate M. E. Cornell. 7 years' experience mechanical and industrial engineering. Age, 28. Desires to locate in Chicago or Middle West. PW-569, Eng. News-Record, Chicago.

MECHANICAL engineer, 33, technical education; six years in manufacture and installation of fireproof and safety appliances; one year reinforced concrete; three years manufacturing cranes, derricks and hoisting machinery, chief engineer two years. Thirteen years' concurrent experience in care of automobile, marine and stationary gas engines. Desires responsible position with modern plant in South or Middle West. PW-509, Eng. News-Record.

STRUCTURAL and reinforced concrete engineer desires responsible position. 17 years' experience. Now assistant bridge engineer for large railroad. Salary $300 per month. PW-507, Eng. News-Record.

STUDY BY MAIL

Reinforced Concrete Engineering
Structural Steel Designing
Structural Drafting

Are you able to design and estimate the cost of any and all types of structures in Reinforced Concrete, Steel or Wood? And are your designs safe, economical and up to the minute? If not, WHY NOT?

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These are courses in experience. You learn to do the work by *actually doing it*. A chance for the ambitious man to get ahead.

Descriptive literature sent free upon request.
Write for it today.

M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

Bids: Feb. 21.

Cast Iron Water Pipe

City Hall, Bayonne, N. J.

Proposals for bids for the furnishing of 30-in. cast-iron water pipe, and the laying of the same under and across the Hackensack River, and on the east and west sides thereof, to connect with the pipe lines of the City of Bayonne, and all other work relating thereto.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, February 21, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and opened at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements, dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by prospective bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10) which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up and relaying of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and re-painting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying of about 900 ft. of 18-in. cast-iron water pipe, with necessary valves and appurtenances, and 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above work embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and relaying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said contract, and to protect all persons performing labor or furnissing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price as required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the city that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed. The certified checks of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the city.

By order of the Board of Commissioners of the City of Bayonne.

HORACE ROBERSON,
Director, Department of Revenue
and Finance, Bayonne, N. J.

MORRIS R. SHERRERD,
Consulting Engineer,
20 Clinton St.,
Newark, N. J.
January 31, 1919.

Bids: March 6.

Road Improvements

Fairmont, W. Va.

Sealed bids will be received until 12:00 o'clock noon, Thursday, March 6, 1919, by the County Court of Marion County, West Virginia, for the construction of approximately six (6) miles of improved roads and streets in Grant District of said Marion County.

A certified check in the sum of Four Hundred Dollars must accompany each bid.

Successful bidders will be required to furnish a bond satisfactory to the County Court.

Plans and specifications for this work are on file in the County Clerk's office, Fairmont, West Virginia.

The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of Marion
County.

Bids: Feb. 15.

So. Bend, Ind.

Proposals for dredging will be received up to and including Feb. 15th, for the widening of channel in St. Joseph river at South Bend, Ind. For further information write Jos. F. Wagner, 531 Leland Ave., South Bend, Indiana.

Bids: Feb. 20

Oiling

STATE OF MARYLAND, STATE ROADS COMMISSION

Baltimore, Maryland.

Sealed proposals for oiling six sections of State Highways requiring approximately 1,270,664 gallons of oil, as follows:

Division	Miles	Gallons
No. 1—Dorchester, Somerset, Wicomico & Worcester Counties	37.95	69,103
No. 2—Cecil, Kent, Queen Anne's, Talbot & Caroline Counties	81.61	165,796
No. 3—Montgomery, (Part), Howard (Part), Pr. George & Charles Cos.	53.30	109,188
No. 4—Baltimore (Part), Harford & Anne Arundel (Part) Counties	147.33	299,376
No. 5—Carroll, Frederick (Part), Howard (Part), Montgomery (Part) and Baltimore (Part) Counties.	147.89	300,939
No. 6—Garrett, Allegheny, Washington & Frederick (Part) Counties	161.65	326,262
	629.73	1,270,664

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 20th day of February, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred ($200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 4th day of February, 1919.

CLYDE H. WILSON, Secretary.
FRANK H. ZOUCK, Chairman.

The right is reserved to increase or diminish the above quantities 10%.

Bids: Feb. 24

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va.

OFFICIAL PROPOSALS

Bids: Feb. 18.

Water Works Extensions

Bayard, Neb.

Sealed proposals will be received by the City Clerk of Bayard, Nebraska, until 8 o'clock p.m. on the 18th day of February, A. D. 1919, for the furnishing of all labor and material and constructing water works extensions in the City of Bayard, in accordance with plans and specifications on file in the office of the City Clerk, Bayard, Nebraska, and in the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska.

Engineer's estimate of cost, $22,750.

Some of the approximate quantities are as follows:

7540 lin.ft. of 4-in., Class "B," cast iron water mains.

2800 lin.ft. of 6-in., Class "B," cast iron water mains.

155 lin.ft. of 8-in., Class "B," cast iron water mains.

2810 lb. of cast iron specials.

Eleven fire hydrants.

Thirteen 4-in. double gate valves and boxes.

Seven 6-in. double gate valves and boxes.

One 8-in. double gate valve and boxes.

One 14-in. well, cased, approximate depth, 72 feet.

One centrifugal pump direct connected to motor, including fittings, wiring, piping and all appliances and appurtenances, concrete pump pit for installation of pumping machinery.

Plans and specifications and form of proposal and contract may be had at the office of the City Clerk, Bayard, Nebraska, or at the office of Selzer & Finley, Scottsbluff, Nebraska, by depositing five dollars ($5), which will be refunded upon the receipt of a bona fide bid, accompanied by the plans and specifications.

Each bid must be accompanied by a certified check for $1200, made payable to the City of Bayard, the same to be retained by the City as liquidated damages in case the bidder refuses to enter into a contract with the City in accordance with his bid.

Bids will be opened at 8 o'clock p.m. on February 18, A. D. 1919, at the office of the City Clerk, Bayard, Nebraska.

The City Council reserves the right to reject any or all bids.

ORIN J. LATHROP,
City Clerk, Bayard, Neb.

Bids: March 4.

County Road Improvement

Augusta, Georgia.

Sealed proposals addressed to the County Commissioners of Richmond County, Augusta, Ga., will be received until 11 o'clock A.M., March 4, 1919, by County Commissioners of Richmond County, for furnishing labor and materials for paving approximately two (2) miles of road, beginning at city limits of Augusta, Ga., to be divided into three sections of 6,200 sq.yd. each, more or less.

Each bid must be accompanied by certified check, payable to the Commissioners of Roads and Revenues of Richmond County (Ga.), for (5%) five per cent of total sum of proposal or bid as a guarantee of good faith.

Detailed plans and specifications and maps of work may be seen and examined after February 15, 1919, at the office of the County Commissioners, County Court House, Augusta, Ga.

The County Commissioners reserve the right to reject any and all bids for any or all sections of said work.

By order of County Commissioners, Richmond County, Ga.

W. W. HUNTER, Engineer.

Feb. 7, 1919.

OFFICIAL PROPOSALS

Bids: March 4.

Heating, Plumbing and Electric Work

Thiells, N. Y.

Sealed proposals for addition to Central Heating plant; construction work; chimney; boiler and stoker equipment; steam and heating plant equipment; heating work (extension of Underground distributing piping); plumbing and drainage, and electric work, at Letchworth Village, Thiells, N. Y., will be received by Hon. Frank A. Vanderlip, President Board of Managers of Letchworth Village, No. 7 Wall Street, New York City, until 12 o'clock Noon on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3169, 3170, 3112, 3113, 3114, 3165 and 3166. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at Letchworth Village, Thiells, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blanks forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

February 4, 1919.

Bids: Feb. 18.

Sewer Main

Bayard, Neb.

Sealed proposals will be received by the City Clerk of Bayard, Nebraska, until 8 o'clock p.m., on the 18th day of February, 1919, for the furnishing of all labor and material and constructing a sewer main in the City of Bayard, in accordance with plans and specifications on file in the office of the City Clerk, Bayard, Nebraska, and in the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska.

Engineer's estimate of cost, $7901.

The approximate quantities are as follows:

2798 lin.ft. of 15 in. V. C. pipe sewer.

Twenty 6-in. "Y's" on 15 in. sewer.

Ten manholes averaging 5.14 vertical feet.

6.73 cu.yd. of concrete.

Plans and specifications, form of contract, and proposal blanks may be had in the office of the City Clerk, Bayard, Nebraska, or at the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska, by depositing five dollars for same; said sum will be returned upon the receipt of a bona fide bid accompanied by the plans and specifications.

Each bid must be accompanied by a certified check for $500, made payable to the City of Bayard, the same to be retained by the City as liquidated damages in case the bidder refuses to enter into a contract with the City in accordance with his bid.

Bids will be opened at 8 o'clock p.m. on February 18, 1919, at the City Hall, Bayard, Nebraska.

The City Council reserves the right to reject any or all bids.

O. J. LATHROP.
City Clerk, Bayard, Neb.

OFFICIAL PROPOSALS

Bids: Feb. 20.

Road Improvements

Rumson, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough ofRumson for the permanent improvement of the Rumson Road in the Borough of Rumson, County of Monmouth and State of New Jersey, with a bituminous surface upon a concrete foundation; estimated amount of surface pavement required is 29,175.55 sq.yd., of foundation 5,203.8 cu.yd.; and opened and read in public at a meeting of the said Mayor and Council to be held at the Council Chambers in the Oceanic Fire Engine House on Thursday, February 20, 1919, at eight P. M.

Drawings and specifications and forms of bids, contract and bond for the proposed work, prepared by George K. Allen, engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer, at No. 60 Broad Street, Red Bank, Monmouth County, New Jersey, and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein, and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to Daniel A. Naughton, Borough Clerk, Rumson, New Jersey, and must be accompanied by a certified check or cash for not less than $1000, payable to the Collector of the Borough of Rumson, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

All bids must be accompanied by a communication in writing from a surety company authorized to do business under the laws of the state of New Jersey, that it is willing, ready and able to act as surety on the bonds of the bidder in question, to the amount set forth in the specifications.

By order of the Mayor and Council of the Borough of Rumson.

DANIEL A. NAUGHTON,
Clerk.

Bids: Feb. 19.

Pipe and Appurtenant Works

Brunswick, Maryland.

Bids received at the office of the mayor and council, Brunswick, Maryland, until 4:30 P.M. February 19, 1919, for furnishing and placing about 26,000 feet of 4 inch to 10 inch wood stave pipe and 8 inch to 10 inch cast iron pipe, including the making of a river crossing and appurtenant work. Plans and specifications can be had at the office of Norton, Bird and Whitman, engineers, 1320 Munsey Building, Baltimore, Maryland, at a charge of $2.50 per set. EUGENE L. HARRISON, Mayor.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 noon, March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging in the Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C. Further information on application.

OFFICIAL PROPOSALS

Bids: Feb. 18.

Lateral Sewers

Bayard, Neb.

Sealed proposals will be received by the City Clerk of Bayard, Nebraska, until 8 o'clock p.m. on the 18th day of February, 1919, for the furnishing of all labor and material and constructing of lateral sewers in the City of Bayard, in accordance with the plans and specifications on file in the office of the City Clerk, Bayard, Nebraska, and in the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska.

The approximate quantities are as follows:

4418 lin.ft. of 10 in. pipe sewer.
15,935 lin.ft. of 8 in. pipe sewer.
167 6-in. "Y's" on 10 in. sewer.
468 6-in. "Y's" on 8 in. sewer.
Fifty-one manholes averaging 7 vertical feet.
Six flush tanks ageraging 6.63 vertical feet.
388 lin.ft. of ½-in. water pipe for flush tank connections.

Plans and specifications, form of contract and proposal blanks may be had at the office of the City Clerk, Bayard, Nebraska, or at the office of Selzer & Finley, Engineers, Scottsbluff, Nebraska, by depositing five dollars ($5) for same; said sum will be returned upon the receipt of a bona fide bid accompanied by the plans and specifications.

Each bid must be accompanied by a certified check for fifteen hundred dollars ($1500), made payable to the City of Bayard the same to be retained by the City of Bayardas liquidated damages in case the bidder refuses to enter into a contract with the City in accordance with his bid.

Bids will be opened at 8 o'clock p.m. on February 18, 1919, at the City Hall, Bayard, Nebraska.

The City Council reserves the right to reject any or all bids.

O. J. LATHROP,
City Clerk, Bayard, Neb.

Bids: March 7.

Concrete Paving

Eldorado, Ill.

Bids will be received by the City Clerk until 2 P.M., Friday, March 7, 1919, for approximately 11,429 sq.yd. of concrete paving, together with the necessary grading, storm sewers, pipe inlets, brick manholes, etc.

Plans and specifications may be seen at the office of the City Clerk, and obtained from the engineer upon receipt of $5, which will be returned upon return of plans and specifications.

PERCY T. CHOISSER, City Clerk,
Eldorado, Ill.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg.,
St. Louis, Mo.

PROPOSALS will be received by the Navy Department at U. S. Coast Guard Headquarters, Washington, D. C., until 2 P.M., Wednesday, March 12, 1919, and publicly opened immediately thereafter, for the construction of a boathouse and accessories at Coast Guard Station No. 233, (Charlotte), Charlotte, New York. Blank proposals, specifications, and other information will be furnished upon application to the Superintendent, Tenth District, Coast Guard, Buffalo, New York; Keeper, Coast Guard Station No. 233, Charlotte, New York, or to U. S. Coast Guard Headquarters, Washington, D. C. Proposals should be inclosed in sealed envelope and marked "Proposal for boathouse and accessories U. S. Coast Guard Station No. 233, Charlotte, New York, to be opened 2 P.M., March 12, 1919." Addressed to the Commodore Commandant, U. S. Coast Guard Headquarters, Bond Building, Washington, D. C. E. P. BERTHOLF, Commodore Commandant.

OFFICIAL PROPOSALS

Bids: Feb. 28.

Turbo-Centrifugal Feed Water Pumps

DEPARTMENT OF PUBLIC SERVICE,
BUREAU OF WATER WORKS
IMPROVEMENT,
CITY OF AKRON, OHIO
Contract No. 129.

Akron, Ohio.

Sealed bids for furnishing Turbo-centrifugal Feed Water Pumps will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock Noon, Central Standard time of Friday, the twenty-eighth day of February, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing of two horizontal steam turbine driven, direct connected, centrifugal boiler feed water pumps, normal capacity 65 to 75 G. P. M. against a total head of 462 ft. Steam to be supplied at approximately 175 lb. pressure and 100 degrees F. superheat.

All proposals must be made on the blank forms furnished by the city; each proposal must be accompanied by a certified check on some solvent bank in the amount of $200.

A satisfactory bond in the sum of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

The specifications and the proposal, contract and bond forms may be seen at the office of the Director, or copies may be obtained from the Bureau of Water Works Improvement, 102 East Mill Street, Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Water Works Superintendent.
G. G. DIXON, Engineer.

Bids: Feb. 25.

Tile Floor Construction

Albany, N. Y.

Sealed proposals for tile floors and base —The Pines Building (new floor construction), Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 12 M., Tuesday, February 25, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of Specification No. 3154. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

January 14, 1919.

PROPOSAL FOR DREDGING.—U. S. Engineer Office, Norfolk, Va.—Sealed proposals will be received here until 12 o'clock noon, February 21, 1919, and then opened, for dredging anchorage and 40-foot channel, and constructing bulkhead. Further information on application.

OFFICIAL PROPOSALS

Bids: March 3.

Annual City Supplies

Hamilton, Ont.

Sealed tenders will be received by the undersigned, addressed to Charles G. Booker, Esq., Mayor; Chairman Board of Control, City Hall, Hamilton, Ont., up to 5 o'clock P.M. on Monday, March 3, 1919, for supplying the Corporation of the City of Hamilton with the following:

Broken stone and screenings, limestone dust, asphalt, asphalt sand, sand and gravel, vitrified brick, creosoted wooden blocks, lumber, sewer pipe, sewer brick, lime, castings (ordinary and special), iron pipe, hydrants, valves, extension boxes, hardware, lead pipe, pig lead, road oil, lubricating oil, flux, fuel oil, gasoline, concrete and garbage duck covers, rubber boots, rubber hose, bass brooms, sectional sweepers, brass work, including ordinary and special brass and bronze castings for water department.

Tenders to be on forms supplied, and plainly marked on the outside "Tender for Asphalt," or as the case may be.

Specifications and form of tender for all of the above can be obtained at the office of the City Engineer, Hamilton, Ontario.

A marked check for 10% of the amount of the tender (unless otherwise stated in Specifications), payable to W. R. Leckie, City Treasurer, must accompany each tender, which will be forfeited should the tenderer and his sureties fail to execute contract within four days after notice of

The lowest or any tender not necessarily acceptance by the City.
accepted.

S. H. KENT,
City Clerk.

Hamilton, January 30, 1919.

Bids: Feb. 26.

Electric Distribution Systems

South Boston, Mass.

Sealed bids or proposals for electric distribution systems, at Dry Dock, South Boston, will be received by the Commission on Waterways and Public Lands at its office, Room 473, State House, Boston, until 12 o'clock noon on Wednesday, February 26, 1919. The work to be done is the furnishing and installing complete and ready for operation electric distribution systems for electric power and lighting (including large lead sheathed copper cables and junction boxes for power, and small transformers, conduits, wiring, fixtures, etc., for interior lighting in the pump house) at the Dry Dock which the Commonwealth is constructing at South Boston.

All proposals must be made upon blank forms which may be obtained at the office of the Commission, where plans and specifications and other information relating to the work may be secured. Each bidder will be required to give to the Commission satisfactory assurance of his competency, experience and responsibility. The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the Commission.

JOHN N. COLE, Chairman.
JESSE B. BAXTER, Commissioners.
WILLIAM S. McNARY,
FRANK W. HODGDON,
Engineer.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
NOTICE TO CONTRACTORS

Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

OFFICIAL PROPOSALS

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: March 4.

Concrete Bridge

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County, Lewisburg, W. Va., until noon, March 4, for the construction of a concrete bridge over Wades Creek, on the James River and Kanawha Pike, one mile east of the White Sulphur Springs. For detailed information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

POSITIONS VACANT

AN engineer or architect wanted, preferably with acquaintance in New York and Boston, who is experienced in concrete design and testing, to take charge of and develop this branch of the office of a firm of consulting engineers of national reputation. Income to be entirely dependent on ability to obtain and hold clientage. -711, Eng. News-Record.

CONTRACTOR'S superintendent — Must have broad experience in all branches of contracting. Write experience in detail. P-632, Eng. News-Record, Chicago.

DRAFTSMAN wanted for map work, good at plain lettering. One who can do computing preferred. Near New York. State particulars and salary considered. P-701, Eng. News-Record.

EXPERIENCED men for road work wanted. Superintendent; foremen; time-keepers; roller men and crusher men; good wages assured; men must have not less than five years' experience. Rosoff Engineering Co., Park Row Building, N. Y. C.

MAN wanted with sufficient training and experience, to qualify him to take charge of small machine shop, connected with manufacturing plant, occupied in making and repairing dies and machinery. P-556, Eng. News-Record.

POSITIONS VACANT

GENERAL contractor's office man—Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully. P-616, Eng. News-Record, Chicago.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO steam shovel foremen wanted for long job, must have experience with air dump cars. Write giving statement of experience, age, nationality and salary expected. P-565, Eng. News-Record, Chicago.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ARMY officer (captain), 1½ years' foreign service, Coast Artillery, discharged. Graduate M. E. Cornell. 7 years' experience mechanical and industrial engineering. Age, 28. Desires to locate in Chicago or Middle West. PW-569, Eng. News-Record, Chicago.

ELECTRICAL and mechanical engineer, specialized on industrial plant work; 25 years' experience installing, operating and repairing motors, generators, traveling cranes, elevators, air compressors, pyrometers and lighting; central station and blast-furnace experience; used to handling men and purchasing material; present salary, $2100. Open for position March 1 or earlier. PW-617, Eng. News-Record, Chicago.

ASPHALT PLANT MAN

WANTED

A man competent and experienced in the operation of a small Asphalt Plant in a large Eastern city. Must be familiar with the different asphalt mixes for road construction and repairing. Write, giving full details of experience, references and salary expected.

P579—Eng. News-Record
10th Ave. at 36th St., New York City

Contractors!

New construction work is about to start up. Establish your bonding connections on a firm basis—NOW.

"IT CAN BE DONE"

I offer you a highly specialized *"Engineering Insurance Service"* in securing

Your Contract Bonds

No Extra Charge ***Try Me Out***

HARMON V. SWART, 19 Liberty Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
NOTICE TO CONTRACTORS
Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON.
Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

OFFICE OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA. February 8th, 1919. Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., Monday, March 3rd, 1919, for grading and improving streets, roads, and avenues in the District of Columbia. Blank forms of proposals, specifications, and all necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners, D. C.

OFFICE OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA, February 8th, 1919. Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511 District Building, until 2 o'clock P.M., Monday, March 3rd, 1919, for laying cement sidewalks in the District of Columbia. Forms of proposals, specifications, together with necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners, D. C.

OFFICIAL PROPOSALS

Bids: March 4.

Heating, Plumbing and Electric Work

Thiells, N. Y.

Sealed proposals for addition to Central Heating plant; construction work; chimney; boiler and stoker equipment; steam and heating plant equipment; heating work (extension of Underground distributing piping); plumbing and drainage, and electric work, at Letchworth Village, Thiells, N. Y., will be received by Hon. Frank A. Vanderlip, President Board of Managers of Letchworth Village, No. 7 Wall Street, New York City, until 12 o'clock Noon on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3169, 3170, 3112, 3113, 3114, 3165 and 3166. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at Letchworth Village, Thiells, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blanks forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

February 4, 1919.

Bids: March 1.

Sewerage System

Phillipsburg, N. J.

Sealed proposals for the construction of the sewerage system will be received by the Board of Commissioners of the Town of Phillipsburg, New Jersey, until 1 P.M., Monday, March 3, 1919.

The work consists of Contract III—Collecting Trunk Sewer:

1287 ft. 20-in. vitrified pipe sewer.
3014 ft. 24-in. vitrified pipe sewer.
351 ft. 27-in. vitrified pipe sewer.
24 manholes.

Contract V—South Main Street Storm Sewer:

171 ft. 18-in. vitrified pipe sewer.
963 ft. 22-in. vitrified pipe sewer.
409 ft. 24-in. vitrified pipe sewer.
8 manholes.

A certified check drawn to the order of James L. Lomerson, Treasurer, in the sum of one thousand dollars ($1000), must accompany each proposal, to be held as liquidated damages. Plans, profiles, specifications, blank forms of proposals, and all other information may be obtained at the office of the Town Engineer. The Board reserves the right to reject any part of any proposal, or any and all proposals.

C. E. TILTON, Town Engineer.
February 10, 1919.

Bids: Feb. 21.

Cast Iron Water Pipe

City Hall, Bayonne, N. J.

Proposals for bids for the furnishing of 30-in. cast-iron water pipe, and the laying of the same under and across the Hackensack River, and on the east and west sides thereof, to connect with the pipe lines of the City of Bayonne, and all other work relating thereto.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, February 21, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and opened at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements, dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by prospective bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10) which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up and relaying of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and re-painting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying of about 900 ft. of 18-in. cast-iron water pipe, with necessary valves and appurtenances, and 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above work embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and relaying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said contract, and to protect all persons performing labor or furnissing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price as required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the city that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed. The certified checks of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the city.

By order of the Board of Commissioners of the City of Bayonne.

HORACE ROBERSON,
Director, Department of Revenue
and Finance, Bayonne, N. J.
MORRIS R. SHERRERD,
Consulting Engineer,
20 Clinton St.,
Newark, N. J.
January 31, 1919.

Bids: March 10.

County Road Works

FAYETTE COUNTY, WEST VIRGINIA
Fayetteville, West Virginia.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until March 10, 1919, for paving two sections of county highway aggregating 9.5 miles.

Bids will be received for Portland cement concrete, bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank forms contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath, County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

These roads have been graded and drained and are ready for surfacing.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.
J. K. McGRATH, Road Engineer.
Dated February 10, 1919.

Bids: March 4.

Dining Room Accommodations

Ward's Island, N. Y.

Sealed proposals for dining room accomodations for patients in main building, construction work; heating, sanitary and electric work, Manhattan State Hospital, Ward's Island, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3124, 3132, 3133 and 3134. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, Room 1715, Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: February 4, 1919.

Bids: Feb. 24.

Road Work

Middlebourne, W. Va.

Sealed proposals for the construction of the following road, addressed to the County Court of Tyler County, West Virginia, and endorsed, "Proposal for Constructing Class A Road in Tyler County," will be received by the undersigned until 2 P.M. on February 24, 1919. The Middlebourne-Salem road, Federal Aid Project No. 18, 14-ft. concrete road, 1.0 mile.

Plans and specifications may be seen at the office of the undersigned at Middlebourne, W. Va., at the office of J. R. Wilson, Division Engineer, Clarksburg, W. Va., and at the office of the State Road Commission, Charleston, W. Va.

Proposals must be made on blank form to be furnished by the undersigned, and must be accompanied by a certified check for at least five per cent of the total amount bid. The right is reserved to reject any or all bids.

J. E. SMITH, County Clerk
of Tyler County, W. Va.,
Middlebourne, W. Va

PROPOSALS will be received by the Navy Department at U. S. Coast Guard Headquarters, Washington, D. C., until 2 P.M., Wednesday, March 12, 1919, and publicly opened immediately thereafter, for the construction of a boathouse and accessories at Coast Guard Station No. 233, (Charlotte), Charlotte, New York. Blank proposals, specifications, and other information will be furnished upon application to the Superintendent, Tenth District, Coast Guard, Buffalo, New York; Keeper, Coast Guard Station No. 233, Charlotte, New York, or to U. S. Coast Guard Headquarters, Washington, D. C. Proposals should be inclosed in sealed envelope and marked "Proposal for boathouse and accessories U. S. Coast Guard Station No. 233, Charlotte, New York, to be opened 2 P.M., March 12, 1919." Addressed to the Commodore Commandant, U. S. Coast Guard Headquarters, Bond Building, Washington, D. C. E. P. BERTHOLF, Commodore Commandant.

OFFICIAL PROPOSALS

Bids: Feb. 18.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, N. J., Tuesday, February 18, 1919, at 2 P.M., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under the Hackensack and Passaic Rivers, in accordance with plans and specifications, and addenda thereto, on file in the office of the City Clerk of Jersey City, for public inspection.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Consulting Engineer, Laurence A. Ball, Room 23, City Hall, Jersey City. A deposit of $25 must accompany each application for copy of plans and specifications, which deposit will be refunded when plans and specifications are returned to the Consulting Engineer in good condition.

Proposals must be inclosed in sealed envelopes, endorsed **"Proposal for Water Main Under Hackensack and Passaic Rivers,"** directed to this board, and handed to the City Clerk in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

Dated: City Clerk's Office,

FRANK A. DOLAN, City Clerk.

Jersey City, January 24, 1919.

Bids: March 6.

City Supplies

City of London, Ontario.

Sealed tenders addressed to the "Chairman and Members, No. 2 Committee" will be received at the office of the City Clerk up to 12 Noon on Thursday, the 6th day of March, 1919, for the following supplies:

- Refined asphalt,
- Road oil,
- Portland cement,
- Limestone dust filler,
- Broken stone,
- Vitrified and land tile,
- Concrete tile,
- Iron castings,
- Lumber,
- Gravel and screenings.

Specifications and form of tender may be obtained at the office of the City Engineer.

Tenders to be accompanied by a marked check or a cash deposit as stated in the Specification.

Lowest or any tender not necessarily accepted.

C. R. SOMERVILLE,
Mayor.
H. A. BRAZIER,
City Engineer.
O. G. KEENE,
Chairman No. 2 Committee.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd. of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

Bids: Feb. 25.

Tile Floor Construction

Albany, N. Y.

Sealed proposals for tile floors and base—The Pines Building (new floor construction), Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 12 M., Tuesday, February 25, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of Specification No. 3154. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

January 14, 1919.

Bids: March 4.

County Road Improvement

Augusta, Georgia.

Sealed proposals addressed to the County Commissioners of Richmond County, Augusta, Ga., will be received until 11 o'clock A.M., March 4, 1919, by County Commissioners of Richmond County, for furnishing labor and materials for paving approximately two (2) miles of road, beginning at city limits of Augusta, Ga., to be divided into three sections of 6,200 sq.yd. each, more or less.

Each bid must be accompanied by certified check, payable to the Commissioners of Roads and Revenues of Richmond County (Ga.), for (5%) five per cent of total sum of proposal or bid as a guarantee of good faith.

Detailed plans and specifications and maps of work may be seen and examined after February 15, 1919, at the office of the County Commissioners, County Court House, Augusta, Ga.

The County Commissioners reserve the right to reject any and all bids for any or all sections of said work.

By order of County Commissioners, Richmond County, Ga.

W. W. HUNTER, Engineer.

Feb. 7, 1919.

Bids: March 4.

Concrete Bridge

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County, Lewisburg, W. Va., until noon, March 4, for the construction of a concrete bridge over Wades Creek, on the James River and Kanawha Pike, one mile east of the White Sulphur Springs. For detailed information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

Bids: March 7.

Furnishing Cutting-in Sleeves and Valves

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATER WORKS IMPROVEMENT
CITY OF AKRON, OHIO
CONTRACT NO. 133

Akron, Ohio.

Sealed bids or proposals for furnishing Cutting-in Sleeves and Valves will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time, of Friday, the seventh day of March, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing of about 138 tee sleeves and valves varying in size from 4 in. x 4 in. to 30 in. x 24 in.; also one tapping machine complete with cutters for making 10 in., 12 in., 16 in. and 20 in. taps into water mains under pressure.

All proposals must be made on the forms furnished by the city.

Each proposal must be accompanied by a satisfactory bond or certified check in the sum of one thousand dollars ($1000). A surety bond in the sum of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Specifications may be seen at the office of the director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Water Works Superintendent.
G. G. DIXON, Engineer.

Bids: March 20.

Wooden Bridge

Springfield, Mass.

Sealed proposals will be received by the Board of Supervisors of the Department of Streets and Engineering, Springfield, Mass., at the office of the City Clerk until 12 M., March 20, 1919, for furnishing falsework and labor for removing three 180-ft. spans of the Old Toll Bridge, a timber structure across the Connecticut River between Springfield and West Springfield and for erecting the superstructure of a new bridge with six 90-ft. wooden lattice truss spans in place thereof.

Plans, specifications, proposal and contract forms may be obtained from the Superintendent of Streets and Engineering, Springfield, Mass.

ROBERT P. MARSH,
Supt. of Streets and Engineering.

Feb. 17, 1919.

Bids: March 7.

Concrete Paving

Eldorado, Ill.

Bids will be received by the City Clerk until 2 P.M., Friday, March 7, 1919, for approximately 11,429 sq.yd. of concrete paving, together with the necessary grading, storm sewers, pipe inlets, brick manholes, etc.

Plans and specifications may be seen at the office of the City Clerk, and obtained from the engineer upon receipt of $5, which will be returned upon return of plans and specifications.

PERCY T. CHOISSER, City Clerk,
Eldorado, Ill.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg.,
St. Louis, Mo.

OFFICIAL PROPOSALS

Bids: March 4.

Construction, Heating, Etc.

Utica, N. Y.

Sealed proposals for mortuary and laboratory, construction, heating, plumbing and electric work, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3153, 3155, 3156 and 3157. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 10, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

OFFICIAL PROPOSALS

Bids: March 10.

Grading and Paving Roadways

KNOX COUNTY COM'S. OFFICE
Mt. Vernon, Ohio.

Sealed proposals will be received at the office of the County Auditor Mt. Vernon, Ohio, until 1 o'clock P.M., Monday, March 10, 1919, for improvements in:

Hilliar Twp., Knox Co., on Sec. "A" of the Centerburg-Croton Road. For constructing culverts and bridges, grading roadway and paving with tar-bound macadam. Width: Pavement, 14 ft. Roadway, 26 ft. Length, 9436.5 ft., or 1.78 miles.

Estimated cost of construction, $40,691.68.

Date set for completion, Nov. 1, 1919.

The bidder must submit a proposal and contract bond for an amount equal to the amount of the estimated cost.

Plans and specifications are on file in the office of the County Surveyor and the County Auditor.

The County Commissioners reserve the right to reject any or all bids.

A. D. RINEHART,
County Auditor.

Dated: February 11, 1919.

Bids: March 22.

Eleven Miles of Railroad

Tillamook County, Oregon.

Bids will be received up to March 17th, 1919, and contract will be awarded March 22, 1919, by this company for the construction of about eleven miles of standard gauge railroad in Tillamook County, Oregon. Proposals, maps and all data necessary for intelligent estimates can be had by addressing or calling A. P. Cole, Chief Engineer, 904 Lewis Building, Portland, Oregon, (or c/o Bay City P. O., Oregon).

THE WHITNEY COMPANY

Bids: March 10.

Road Improvements

Salem, N. J.

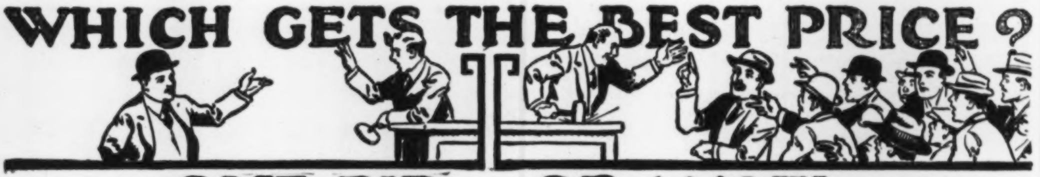
Notice is hereby given that sealed bids will be received by Road Committee of the Board of Chosen Freeholders of the County of Salem, for the building of 4th and 5th Sections of Malaga-Pennsgrove Road, in the township of Pilesgrove in the County of Salem, with a concrete surface, estimated amount of surface pavement required is 41,453 sq.yd., and opened and read in public at the Court House in Salem, on March 10, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and approved by the State Commissioner of Public Roads have been filed in the office of the said Engineer at Salem, N. J., and of said Commissioner at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer or proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be inclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY, Clerk.

WHICH GETS THE BEST PRICE?



ONE BID : OR MANY

One bidder usually buys at a sale price.

A number of bidders enables the seller to get full market value.

When you have Second Hand Equipment to sell you want *all the bidders possible.*

Advertising secures more bidders.

An advertisement in *one* issue may make a sale possible but—to sell at the *best* price you must have a choice among a *number* of buyers.

A *number* of insertions will get them for you.

BE SURE—advertise your equipment until it is sold. Advertise it in the SEARCHLIGHT SECTION to get the* most *bidders.

0010

OFFICIAL PROPOSALS

Bids: March 15.

Steel Deck Plate Girder Railroad Bridge

Charleston, Miss.

Bids will be received until March 15, 1919, for furnishing all labor, construction plant and all equipment for the complete erection of the sub- and super-structure of a steel railroad bridge for the Lamb-Fish Lumber Company, Charleston, Miss., across the Tallahatchie River, seven miles westerly of Charleston, Tallahatchie County, Mississippi.

The bridge will consist of three deck plate girder spans, forty, seventy-four and sixty-one feet in length, the central 74-ft. span being a vertical lift span of the "Waddell" type. The spans will be carried on four concrete piers, pedestals of which will rest on wooden piles. Approximate quantities are as follows:

Concrete in piers bases..........	420 cu.yd.
Piles below bases of piers......	2750 lin.ft.
Concrete in piers shafts.......	500 cu.yd.
Structural steel	130 tons
Machinery	14 tons
Rails and fastenings	8000 lb.
Timber in deck	37 M.ft.

All materials will be delivered to the contractor f.o.b. cars at the bridge site. The bridge approaches will not be included in the contract.

The present contract form and specifications are prepared on a fixed cost plus fixed profit basis, wherein the bidder states his estimated cost and profit, and if he under runs his estimate of cost he receives bonus, where as if he over runs he loses part of his profit, but proposals and bids based on a "lump sum contract" will be also carefully considered.

Each bid is to be accompanied by a certified check for one thousand dollars payable to the Lamb-Fish Lumber Company. The right is reserved to reject any and all bids.

Plans and specifications can be obtained from

LAMB-FISH LUMBER COMPANY.
VICTOR K. WAGNER, Civil Engineer,
Charleston, Mississippi.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

S. S. Johnson & Bro.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: March 5.

Highway Reconstruction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a section of state highway 2.04 miles in length located upon the Boston Neck Road in the towns of North Kingstown and Narragansett will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. on Wednesday, March 5, 1919, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth Excavation	7000 cu.yds.
Stone Fill Foundation........	1450 cu.yds.
Gravel Foundation...........	7875 cu.yds.
Crushed Stone	7000 tons
Hauling, heating and applying bituminous binder (Penetration Method)	60000 gallons

Bids msut be made upon blank forms to be furnished by the Board. No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, February 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BUEREN
J. HENRY WOODARD

Sink Well

Illinois.

Desire to sink well about 18 ft. diameter through top soil, sand and gravel with streaks of blue clay to depth of 45 ft. to water bearing strata.

Correspondence invited from contractors with experience along this line. Address FW-751, Engineering News-Record.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

Contractors—this is for you!
What is Engineering Contract Bond Service?
Why is it a better service for you?
Find out—Get in touch with me
TRY ME OUT
Swart Service Really Serves
Phone, Wire or Write
HARMON V. SWART
19 Liberty Street, New York City

OFFICIAL PROPOSALS

Bids: Feb. 28.

State Road Work

Connecticut.

SEALED PROPOSALS will be received by the State Highway Commissioner, Fourth Floor, West End, State Capitol, Hartford, Connecticut, until 2 P.M., Friday, February 28, 1919 for the following sections of State work in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWNS OF AVON AND FARMINGTON: About 9938 linear feet of Native Stone on the River Road. Plans and specifications with R. W. Stevens, Division Engineer, 408 Main Street, Hartford, Conn.

TOWN OF GROTON: About 13,933 linear feet of Concrete Road(native stone to be used) on the Groton-Poquonoc Bridge Road Ulans and specifications at office of A. W. Bushell, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF NORTH CANAAN: A three span reinforced concrete "T" Beam Bridge over Blackberry River on the Canaan-Lakeville Road. Plans and specifications at office of R. S. Hulbert, Division Engineer, Station A, Winsted, Conn.

TOWN OF NORTH HAVEN: About 2930 linear feet of Native stone Macadam on the Clintonville-Northford Road. Plans and specifications at Town Clerk's office.

TOWN OF STRATFORD: About 7300 linear feet of Hassam, Concrete, Warrentite Topeka, or Asphalt on Barnum Ave. No plans. Specifications at office of E. C. Welden, Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

TOWNS OF THOMASTON AND WATERTOWN: A reinforced concrete "T" Beam Bridge over Branch of Naugatuck River on the Morris Road. Plans and specifications at office of Thomaston Selectmen and at office of Watertown Selectment.

TOWNS OF WATERBURY AND THOMASTON: About 7258 linear feet of concrete or Topeka over 6" concrete base on the Waterbury-Thomaston Road. Specifications at office of E. C. Welden, Division Engineer, Chember of Commerce Bldg., New Haven. Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one- third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut,
February 17, 1919.

C. J. BENNETT,
STATE HIGHWAY COMMISSIONER,
FOURTH FLOOR, WEST END, CAPITOL,
HARTFORD, CONN.

OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., Feb. 12, 1919.—Sealed proposals will be received at the office of the Secretary of Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., Thursday, March 6, 1919, for paving various streets and avenues in the District of Columbia with sheet asphalt. Forms of Proposal, Specifications, together with necessary information, may be obtained from the Chief Clerk, of the Engineer Department, Room 427, District Building. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners, D. C.

U. S. ENGINEER OFFICE, SEATTLE, WASH.—Sealed proposals for construction of bank revetment and jetties, and for dredging Nome Harbor, Alaska, will be received at this office and at the office of the District Judge, Nome, Alaska, until noon on March 15, 1919, and then opened. Information on application.

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Engineering News-Record

with a circulation of over 32,000 a week, reaches almost every worthwhile contractor, manufacturer and dealer interested in public contracts.

Over 4,000 Official Proposals

have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

One Dominant Paper

This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

The One Nationally Recognized Medium for Proposal Advertising

Engineering News-Record

OFFICIAL PROPOSALS

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
NOTICE TO CONTRACTORS

Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him·of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: March 22.

Eleven Miles of Railroad

Tillamook County, Oregon.

Bids will be received up to March 17th, 1919, and contract will be awarded March 22, 1919, by this company for the construction of about eleven miles of standard gauge railroad in Tillamook County, Oregon. Proposals, maps and all data necessary for intelligent estimates can be had by addressing or calling A. P. Cole, Chief Engineer, 904 Lewis Building, Portland, Oregon, (or c/o Bay City P. O., Oregon).

THE WHITNEY COMPANY

U. S. ENGINEER OFFICE, SEATTLE, WASH.—Sealed proposals for construction of bank revetment and jetties, and for dredging Nome Harbor, Alaska, will be received at this office and at the office of the District Judge, Nome, Alaska, until noon on March 15, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: March 15.

Steel Deck Plate Girder Railroad Bridge

Charleston, Miss.

Bids will be received until March 15, 1919, for furnishing all labor, construction plant and all equipment for the complete erection of the sub- and super-structure of a steel railroad bridge for the Lamb-Fish Lumber Company, Charleston, Miss., across the Tallahatchie River, seven miles westerly of Charleston, Tallahatchie County, Mississippi.

The bridge will consist of three deck plate girder spans, forty, seventy-four and sixty-one feet in length, the central 74-ft. span being a vertical lift span of the "Waddell" type. The spans will be carried on four concrete piers, pedestals of which will rest on wooden piles. Approximate quantities are as follows:

Concrete in piers bases	420 cu.yd.
Piles below bases of piers	2750 lin.ft.
Concrete in piers shafts	500 cu.yd.
Structural steel	130 tons
Machinery	14 tons
Rails and fastenings	8000 lb.
Timber in deck	37 M.ft.

All materials will be delivered to the contractor f.o.b. cars at the bridge site. The bridge approaches will not be included in the contract.

The present contract form and specifications are prepared on a fixed cost plus fixed profit basis, wherein the bidder states his estimated cost and profit, and if he under runs his estimate of cost he receives bonus, where as if he over runs he loses part of his profit, but proposals and bids based on a "lump sum contract" will be also carefully considered.

Each bid is to be accompanied by a certified check for one thousand dollars payable to the Lamb-Fish Lumber Company. The right is reserved to reject any and all bids.

Plans and specifications can be obtained from

LAMB-FISH LUMBER COMPANY,
VICTOR K. WAGNER, Civil Engineer,
Charleston, Mississippi.

Bids: March 10.

Grading and Paving Roadways

KNOX COUNTY COM'S. OFFICE
Mt. Vernon, Ohio.

Sealed proposals will be received at the office of the County Auditor Mt. Vernon, Ohio, until 1 o'clock P.M., Monday, March 10, 1919, for improvements in:

Hilliar Twp., Knox Co., on Sec. "A" of the Centerburg-Croton Road. For constructing culverts and bridges, grading roadway and paving with tar-bound macadam. Width: Pavement, 14 ft. Roadway, 26 ft. Length, 9436.5 ft., or 1.78 miles.

Estimated cost of construction, $40,691.68.

Date set for completion, Nov. 1, 1919.

The bidder must submit a proposal and contract bond for an amount equal to the amount of the estimated cost.

Plans and specifications are on file in the office of the County Surveyor and the County Auditor.

The County Commissioners reserve the right to reject any or all bids.

A. D. RINEHART, County Auditor.
Dated: February 11, 1919.

OFFICIAL PROPOSALS

Bids: March 5.

Highway Reconstruction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a section of state highway 2.04 miles in length located upon the Boston Neck Road in the towns of North Kingstown and Narragansett will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 m. on Wednesday, March 5, 1919, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth Excavation	7000 cu.yds.
Stone Fill Foundation	1450 cu.yds.
Gravel Foundation	7875 cu.yds.
Crushed Stone	7000 tons
Hauling, heating and applying bituminous binder (Penetration Method)	60000 gallons

Bids msut be made upon blank forms to be furnished by the Board. No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, February 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BUEREN
J. HENRY WOODARD

Bids: March 20.

Wooden Bridge

Springfield, Mass.

Sealed proposals will be received by the Board of Supervisors of the Department of Streets and Engineering, Springfield, Mass., at the office of the City Clerk until 12 M., March 20, 1919, for furnishing falsework and labor for removing three 180-ft. spans of the Old Toll Bridge, a timber structure across the Connecticut River between Springfield and West Springfield and for erecting the superstructure of a new bridge with six 90-ft. wooden lattice truss spans in place thereof.

Plans, specifications, proposal and contract forms may be obtained from the Superintendent of Streets and Engineering, Springfield, Mass.

ROBERT P. MARSH,
Supt. of Streets and Engineering.
Feb. 17, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

OFFICIAL PROPOSALS

Bids: March 25.

Steel Pipe and Appurtenances

Jersey City, N. J.

Sealed proposals for furnishing and laying, complete, 34,590 ft. of 72-in. rivetted steel pipe and appurtenances, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, March 25, 1919, at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal forms, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

he Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: Feb. 18, 1919.

Bids: March 5.

Gravity Water Line

City of Winston-Salem, N. C.

Sealed proposals for the ditching and laying of 10,400 ft. of 30-in. wood stave pipe will be received by the City of Winston-Salem up to 4 o'clock P.M., of the fifth day of March, 1919. Proposals to be addressed to Commissioner of Public Works, and endorsed "Proposals for Water Line."

Plans may be seen and specifications and blank forms of proposal may be obtained at the office of the Commissioner of Public Works.

A certified check equal to 5% of the amount of the bid and made payable to the Treasurer of the City of Winston-Salem will be required to accompany each bid.

The right is reserved to reject any and all bids.

JOSEPH FIRTH,
Commissioner of Public Works.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: March 4.

Construction, Heating, Etc.

Utica, N. Y.

Sealed proposals for mortuary and laboratory, construction, heating, plumbing and electric work, Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany N. Y., until 3 o'clock P.M. on Tuesday, March 4, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3153, 3155, 3156 and 3157. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 10, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: March 1.

Sewerage System

Phillipsburg, N. J.

Sealed proposals for the construction of the sewerage system will be received by the Board of Commissioners of the Town of Phillipsburg, New Jersey, until 1 P.M., Monday, March 3, 1919.

The work consists of Contract III—Collecting Trunk Sewer:

1287 ft. 20-in. vitrified pipe sewer.
3014 ft. 24-in. vitrified pipe sewer.
351 ft. 27-in. vitrified pipe sewer.
24 manholes.

Contract V—South Main Street Storm Sewer:

171 ft. 18-in. vitrified pipe sewer.
963 ft. 22-in. vitrified pipe sewer.
409 ft. 24-in. vitrified pipe sewer.
8 manholes.

A certified check drawn to the order of James L. Lomerson, Treasurer, in the sum of one thousand dollars ($1000), must accompany each proposal, to be held as liquidated damages. Plans, profiles, specifications, blank forms of proposals, and all other information may be obtained at the office of the Town Engineer. The Board reserves the right to reject any part of any proposal, or any and all proposals.

C. E. TILTON, Town Engineer.
February 10, 1919.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer, Lock Box 1017, Memphis, Tenn.

Bids: March 10.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by Road Committee of the Board of Chosen Freeholders of the County of Salem, for the building of 4th and 5th Sections of Malaga-Pennsgrove Road, in the township of Pilesgrove in the County of Salem, with a concrete surface, estimated amount of surface pavement required is 41,453 sq.yd., and opened and read in public at the Court House in Salem, on March 10, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and approved by the State Commissioner of Public Roads have been filed in the office of the said Engineer at Salem, N. J., and of said Commissioner at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be inclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY, Clerk.

Bids: March 4.

Road Improvement

West Virginia.

Sealed proposals for the improvement of the following roads addressed to the county court of Hancock county, West Virginia, will be received by the undersigned until 1 P.M., March 4, 1919:

Section A—Of Federal Aid Project. No. 22, $\frac{3}{10}$ mile.

Section B—Of Federal Aid Project. No. 22, 75/100 mile. To be paved with brick on concrete base 9 ft. wide.

Section 2—Lawrenceville Road. Grant district, 1 mile.

Section 3—Chester-Pughtown Road. Grant district, 1 mile.

Section 2—Harden's Run Road. Clay district, ½ mile.

Section 3—Ewing Run Road. Clay district, ½ mile.

To be paved with brick or concrete 9 ft. wide.

Plans and specifications may be seen at the office of the County Clerk and of the Federal Aid Project at the office of the State Road Commission, Charleston, W. Va. Proposals shall be submitted on blank forms to be provided by the undersigned and shall be accompanied by a certified check for $500 for each proposal. The right is reserved to reject any or all bids.

R. R. HOBBS,
County Clerk,
New Cumberland, W. Va.

Bids: March 4.

County Road Improvement

Augusta, Georgia.

Sealed proposals addressed to the County Commissioners of Richmond County, Augusta, Ga., will be received until 11 o'clock A.M., March 4, 1919, by County Commissioners of Richmond County, for furnishing labor and materials for paving approximately two (2) miles of road, beginning at city limits of Augusta, Ga., to be divided into three sections of 6,200 sq.yd. each, more or less.

Each bid must be accompanied by certified check, payable to the Commissioners of Roads and Revenues of Richmond County (Ga.), for (5%) five per cent of total sum of proposal or bid as a guarantee of good faith.

Detailed plans and specifications and maps of work may be seen and examined after February 15, 1919, at the office of the County Commissioners, County Court House, Augusta, Ga.

The County Commissioners reserve the right to reject any and all bids for any or all sections of said work.

By order of County Commissioners, Richmond County, Ga.

W. W. HUNTER, Engineer.
Feb. 7, 1919.

Bids: March 20.

Road Work—Re-Letting

West Virginia.

Sealed proposals for the construction of the following roads addressed to the County Court of Barbour County, West Virginia and endorsed "Proposals for Construction of Class A Road in Barbour County," will be received by said Court at the office the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 20th day of March, 1919.

The Fairmont and Beverley Turnpike Federal Aid Projects No. 16 and No. 27—Bituminous macadam: 14 ft. wide, 6.5 miles.

The Junior Road—Bituminous macadam: 14 ft. wide, 2.85 miles.

Plans and Specifications may be seen at the office of said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of Barbour County Court,
Philippi, W. Va.

Bids: March 18.

Grading Boulevard

Kansas City, Mo.

Bids will be received by the Board of Park Commissioners of Kansas City, Missouri, up to 2 o'clock March 18th, 1919, at their office, for the grading of Van Brunt Boulevard from the north line of Van Brunt Boulevard along 12th Street, to the north line of Linwood Boulevard. Deposit in the sum of $1500.00, cash or certified check made payable to the City Comptroller, will be required with each bid. Plans, specifications and form of contract can be seen at the office of the Board. The Board reserves the right to reject any or all proposals, and contract may be let to the lowest and best bidder. Additional information furnished upon application to T. C. Harrington, Secretary.

Bids: March 19.

Filtration Plant

CONTRACT 27

Hartford, Conn.

Sealed proposals, addressed to the Board of Water Commissioners of the City of Hartford, will be received at the office of the Board, Municipal Building, Hartford, until 12 M., Wednesday, March 19, 1919, for the construction of eight concrete-covered filter beds an aerator and connecting pipe lines.

Plans and specifications may be obtained after March 5 at the office of the Manager and Chief Engineer, on deposit of $10 which will be refunded on the return, in good condition, of both plans and specifications. Specifications used in making a bid will be considered as returned. Prior to March 5 plans may be seen at the office of the Manager and Chief Engineer and the site of the work visited.

A certified check or cashier's check for $25,000 must accompany each bid and the successful bidder will be required to furnish bonds in the sum of $400,000.

The right is reserved to reject any and all bids.

BOARD OF WATER COMMISSIONERS
FRANK E. HOWARD, President.
FRED D. BERRY, Secretary.
CALEB MILLS SAVILLE,
Manager and Chief Engineer,
Pilgard Building, 1026 Main Street,
Hartford, Conn.

Bids: March 10.

Sanitary Sewers

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, N. C., for the construction of vitrified pipe sanitary sewers, until 3:00 o'clock P.M., March 10, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

The work consists of the following:

Alston Ave. Outfall....	11,159 feet	—12 inch
Alston Ave. Outfall....	936 feet	— 8 inch
Main, Morris, Watkins and Spring Streets...	2,760 feet	— 8 inch
Main Street House Connections	8,400 feet	— 6 inch
Neuse River Outfall...	12,100 feet	—24 inch

Plans and specifications of the proposed work may be had at the office of the City Engineer between the hours of 9:00 A.M. and 5:00 P.M., from February 18th, 1919, to March 10th, 1919.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor.
GEO. W. WOODARD, City Clerk.
J. L. MOREHEAD, City Attorney.
H. W. KUEFFNER, City Engineer

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: March 14.

Electric Fixtures

Hudson, N. Y.

Sealed proposals for electric work—additional lights, cottages 5, 7 and 10—installing electric fixtures, New York State Training School for Girls, Hudson, N. Y., will be received by Mrs. Annie Winsor Allen, President of the Board of Managers, New York State Training School for Girls, Hudson, N. Y., until 5 o'clock P.M., on Friday, March 14, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3171. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York State Training School for Girls, Hudson, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 17, 1919.

Bids: March 12.

Paving

OFFICE OF THE PAVING COMMISSION
Baltimore, Maryland.

SEPARATE SEALED PROPOSALS, executed in duplicate, addressed to the Board of Awards, care of the City Register, will be received by him in his office, in the City Hall, until 12:00 M. Wednesday, March 12th, to grade curb and pave with Sheet Asphalt, Vitrified Block, Wood Block, and Granite Block Redressed, all on concrete base, and Cement Concrete, the streets and alleys listed in the following contracts:

CONTRACT NO. 152

	From	To
McElderry St.,	Milton Ave.,	Linwood Ave.
McElderry St.,	Wolfe St.,	Chester St.
Madison St.,	Patt'n. Park Ave.,	Luzerne St.
Collington Ave.,	Ashland Ave.,	Biddle St.
Lakewood Ave.,	Baltimore St.,	Monument St.
Jefferson St.,	Milton Ave.,	Lakewood Ave.
Orleans St.,	Milton Ave.,	Lakewood Ave.

Sheet Asphalt	37,250 sq.yds.
Vitrified Block	2,685 sq.yds.
Granite Block Redressed	105 sq.yds.
Certified Check	$2000.00

CONTRACT NO. 153

Lanvale St.,	Pulaski St.,	Druid Hill Ave.
Payson St.,	Lanvale St.,	Mosher St.
Lafayette Ave.,	Payson St.,	Fulton Ave.

Sheet Asphalt	28,900 sq.yds.
Vitrified Block	2,570 sq.yds.
Granite Block Redressed	400 sq.yds.
Wood Block	2,200 sq.yds.
Certified Check	$2000.00

CONTRACT NO. 154

Randall St.,	Hanover St.,	Covington St.
William St.,	Randall St.,	Clement St.
Battery Ave.,	Randall St.,	Gittings St.
Covington St.,	Gittings St.,	Fort Ave.
Covington St.,	Gittings St.,	Falsom St.
Clement St.,	Light St.,	William St.
Grindall St.,	William St.,	Covington St.
Clement St.,	Riverside Ave.,	Key Highway.
Poultney St.,	Patapsco St.,	Light St.

Sheet Asphalt	31,100 sq.yds.
Vitrified Block	2,370 sq.yds.
Certified Check	$2000.00

CONTRACT NO. 155

Barclay St.,	Chase St.,	Biddle St.
Brentwood Ave.,	Eager St.,	Biddle St.
Forrest St.,	Monument St.,	Eager St.
Forrest St.	Chase St.,	Biddle St.
Ashland Ave.,	McKim St.,	Aisquith St.
Somerset St.,	Madison St.,	Biddle St.

Sheet Asphalt	16,570 sq.yds.
Granite Block Redressed	120 sq.yds.
Vitrified Block	1,620 sq.yds.
Certified Check	$1200.00

CONTRACT NO. 156

Edmondson Ave.,	Fremont Ave.,	Clinton Ave.
Brune St.,	Franklin St.,	Harlem Ave.
Clinton Ave.,	Franklin St.,	Myrtle Ave.
Argyle Ave.,	Lanvale St.,	Sewell St.

Sheet Asphalt	14,000 sq.yds.
Vitrified Block	1,060 sq.yds.
Certified Check	$1000.00

CONTRACT NO. 157

Jordan Alley,	Biddle St.,	Lafayette Ave.
Jordan Alley	Mosher St.,	Wilson St.
Jordan Alley,	Robert St.,	North Ave.
Camel Alley,	Madison St.,	Cathedral St.
Brexton St.,	Cathedral St.,	Eager St.

Cement Concrete	7,930 sq.yds.
Vitrified Block	20 sq.yds.
Wood Block	40 sq.yds.
Certified Check	$400.00

The figures above represent the approximate quantities of the principal items appearing in the contracts.

Specifications and proposal sheets and all other information can be obtained at the office of the Paving Commission, 214 E. Lexington St. A deposit of $5.00 will be required for specifications covering each contract. This will not be refunded unless a bid is filed.

The Board of Awards reserves the right to reject any and all bids. A certified check of the bidder on a clearing-house bank, drawn to the order of the Mayor and City Council of Baltimore to the amount as recited above, must accompany each bid.

The successful bidder will be required to furnish bond and to comply with the City Charter respecting contracts.

By order of the Paving Commission.

S. C. ROWLAND, Chairman.
J. MYERS HEDIAN, Secretary.
APPROVED:
J. BARRY MAHOOL,
Acting Pres. Board of Awards.
FRANK DRISCOLL, Asst. City Solicitor.

Bids: March 20.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A.M., March 20, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 27,520 lineal feet of Reinforced Concrete in Adams Co.; 8984 feet of Bituminous Concrete in Berks Co.; 1842 feet of Vitrified Block in Clarion Co.; 12,636 feet of Bituminous Concrete in Clinton Co.; 8420 feet of Vitrified Block in Columbia Co.; 5745 feet of Bituminous Concrete and Vitrified Block in Delaware Co.; 4566 feet of Vitrified Block in Elk Co.; 49,959 feet of Reinforced Concrete in Erie Co.; 26,112 feet of Reinforced Concrete and Hillside Vitrified Block in Fayette Co.; 34,259 feet of Reinforced Concrete

in Greene Co.; 5600 feet of Reinforced Concrete in Lancaster Co.; 4906 feet of Reinforced Concrete in Lawrence Co.; 35,035 feet of Reinforced Concrete in Lehigh Co.; 23,510 feet of Reinforced Concrete in Monroe Co.; 7824 feet of Reinforced Concrete in Tioga Co. and 26,862 feet of Reinforced Concrete in Warren Co. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of the State Highway Department, Harrisburg; 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 10.

County Road Works

FAYETTE COUNTY, WEST VIRGINIA
Fayetteville, West Virginia.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until March 10, 1919, for paving two sections of county highway aggregating 19.5 miles.

Bids will be received for Portland cement concrete, bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank forms contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath, County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

These roads have been graded and drained and are ready for surfacing.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.

J. K. McGRATH, Road Engineer.
Dated February 10, 1919.

Bids: March 4.

Concrete Bridge

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County, Lewisburg, W. Va., until noon, March 4, for the construction of a concrete bridge over Wades Creek, on the James River and Kanawha Pike, one mile east of the White Sulphur Springs. For detailed information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER.
County Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 26, 1919.—Sealed proposals will be opened in this office at 3 p.m., April 15, 1919, for the installation complete of three electric triplex elevator pumps, etc., in the United States courthouse, customhouse, and post office at Omaha, Nebr., in accordance with the drawing and specification, copies of which may be had at this office in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

N. B.—Bidders are required to return the drawing and specification without marks, notes, or other mutilations.

The Government frank sent to inteding bidders is to be used for the return of the drawing and specification and for no other purpose.

OFFICIAL PROPOSALS

Bids: March 5.

Road Improvement

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the improvement of Section No. 1 Burlington-Florence Road in the Townships of Burlington and Florence, in the County of Burlington, with a macadam surface upon a macadam foundation; estimated amount of surface pavement required is 15,870 square yards, of foundation 15,870 square yards; and opened and read in public at the Court House, Mount Holly, N. J., on March 5th, 1919, at 12 noon.

Drawing, specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, Burlington County Engineer and approved by the State Highway Commission have been filed in the office of the said engineer at No. 11 Main Street, Mount Holly, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board and must be accompanied by a certified check or cash for not less than $1000.00 and be delivered at the place and on the hours above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Burlington.

HARRY HAWKINS, Jr.

Bids: March 10.

Sanitary Sewer

Carlisle, Pa.

Sealed bids will be received by the Town Council of the Borough of Carlisle, Pa., until 12 o'clock noon, March 10th, 1919, for the construction of about 4000 feet of Sanitary Sewer with necessary Manholes, Lampholes and Flushtanks, said sewer to consist of eight and ten inch Terra Cotta pipe of first quality.

Specifications, plans and estimates can be seen at the Engineer's Office in Municipal Building, or can be had by communicating with the Borough Secretary.

The Council reserves the right to reject any or all bids.

Bids should be marked "bids for sewer" and addressed to

W. W. DARON, Borough Secretary.
Carlisle, Pa.

OFFICIAL PROPOSALS

Bids: March 20.

Engine Generator Unit

Macon, Missouri.

Sealed bids addressed to City Clerk, Macon, Missouri, and endorsed proposals for power plant improvements will be received until 8 P.M., March 20th, at which time they will be publicly opened and read. The work consists of furnishing and erecting complete 1—400 to 450 KVA Generating Unit Direct Connected to a Uniflow or Compound Corliss Engine, Condensing equipment, Spray Pond equipment, and Switchboard for same. Certified check for $1500. The City reserves the right to reject any or all bids. Specifications may be obtained from Engineer upon receipt of deposit of $10. $8 will be refunded upon return of specifications.

NAT M. LACY, Mayor.
W. H. MARTIN, City Clerk.
FRANK L. WILCOX, Engineer.
Syndicate Trust Bldg.
St. Louis, Mo.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 M., March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd. of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

POSITIONS VACANT

ACCOUNTANT wanted, by contracting company, experienced in engineering and construction work. State fully experience with salaries received. P-811, Eng. News-Record.

ASSISTANT to superintendent. Wanted, young mechanical engineer as assistant to superintendent of structural steel shop. Must have had some experience in structural work. either in drafting office or shop, and be a man of strong personality and one who can be trained to handle men. Splendid opportunity for advancement for man with lots of "pep," not afraid of work, and who can develop executive ability for scientific management. Will have opportunity to study under noted efficiency engineers. State training, experience and salary in first letter, also give references. P-804, Eng News-Record, Cleveland.

A STEAM engineer wanted; capable of taking full charge of electric light plant and pumping station; one 500 kilowatt and one 1000 kilowatt Allis-Chalmers turbine. City 7000 population, located in the middle west. Salary to start, $1800. P-834, Eng. News-Record, Chicago.

Experienced in taking off and estimating steel for large buildings, bridges, etc. Address stating experience. references and salary expected. The Case Crane & Engineering Company, Columbus, Ohio.

POSITIONS VACANT

CARPENTER foreman wanted on large bridge construction. Write, giving age, nationality, experience and salary expected. P-810. Eng. News-Record, Chicago.

CIVIL engineer wanted, of practical experience in building concrete and brick State roads. Requirements: Ability to estimate costs, make bids, purchase machinery and assume active general management of such an enterprise. A splendid opportunity for the right man. No one not capable of earning a large salary need answer. Reply in own handwriting stating experience, salary expected and other particulars. Lock Box 395. Erie. Pa.

DESIGNER and draftsman with waterworks experience. C. E. graduate who can make detailed designs for waterworks structures in Ohio city. P-803. Eng. News-Record, Cleveland.

MAN wanted with sufficient training and experience to qualify him to take charge of an ornamental shop. employing about fifty (50) men. fabricating stairs. fire escapes and other ornamental iron work; one who is capable of supervising machine shop employing twenty (20) men. in conection with ornamental work given preference. P-736, Eng. News-Record.

PRACTICAL quarry man wanted, capable taking full charge: one who is familiar with southern conditions and experienced in Sandstone, Limestone and Granite. In reply, give complete record, age, experience, capacity, references. P-755, Eng. News-Record, Chicago.

STRUCTURAL steel draftsman wanted for building work. Apply Hay Foundry & Iron Works, Newark, N. J.

SUPERINTENDENT, foremen, wanted, able to get results, for grading and concrete mixer gangs. Rollermen, pumpmen, cranemen, Keystone men. Dinky engineer and trainmen, auto truck operators, commissary man, cook, etc., for early start. State age, experience, references, wages in first letter. Also camp complete for 75 to 100 men. P-807, Eng. News-Record.

SUPERINTENDENT wanted for highway construction in mountains. Steam shovel work; state experience and salary expected. P-799, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO municipal engineers wanted by April 1st., 1919, on construction of over 50,000 sq.yd. sheet asphalt and other paving, extension of sewer system, water plant, etc., etc. One experienced and reliable engineer capable of handling job as resident engineer. Also one assistant engineer, accurate instrument-man, with several years' experience in paving and municipal work. State fully education, experience and salary wanted. Consulting Engineer, Box 117, Covington, Va.

WANTED—By Eastern railroad, land appraisers experienced in Federal valuation work. State fully education, experience and salary desired. P-735, Eng. News-Record, Philadelphia.

WANTED for structural steel fabricating shop in South, several competent draftsmen and checkers, experienced in making shop detail plans for mill building work; state age, nationality. experience, salary desired and date could start; transportation paid. P-764, Eng. News-Record.

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HARMON V. SWART
19 Liberty Street, New York City

WANTED

Several Young College Graduates

for positions in drawing room of large eastern structural fabricating company. Must have some experience. Excellent opportunity for advancement according to ability. Give full particulars and references. *Address*

P795—Engineering News-Record
10th Ave. at 36th St., New York City

POSITIONS VACANT

YOUNG man as assistant to engineer in general practice and superintendent of two water plants in central Connecticut. Man with some experience or training in engineering preferred. Work is miscellaneous surveying, drafting and general work about water plants. Wanted—someone who will be willing to be on the work at seven o'clock in the morning when required and will not expect the Superintendent to do all the over-time work. Reply stating experience and pay or salary desired, also give references. P-819, Eng. News-Record.

CIVIL SERVICE OPPORTUNITIES

Assistant engineer, Light, Heat & Power—Public Service Comm. (1st. dist.)—March 29. Salary $3000. Junior Engineer, (Grade 8)—Public Service Comm. (1st dist.)—March 29. Salary $1500-$1800. Lock Operator, Dept. of Public Works, March 29. Salary $1100-$1800. State Civil Service Commission, Albany, New York.

EMPLOYMENT AGENCIES

THE ENGINEERING AGENCY, established 1893, is an employment bureau for high grade executives in engineering, manufacturing and construction work. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago.

WESTERN C. E. openings. Instrumentmen and draftsmen desiring western locations, on highway and irrigation work, at $125 to $150 a month, communicate with the Business Men's Clearing House, Denver, Colorado.

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, T64-66 Niagara St., Buffalo, New York.

POSITIONS WANTED

Mechanical and Electrical

ENGINEERING executive; mechanical, electrical; married; technical graduate; 12 years' experience, office and field; executive, purchasing, maintenance, construction, operating and erection of steam, fuel oil, rotary and reciprocating engines, auxiliaries, electrical machinery and allied work. Desires position with manufacturing plant, engineering corporation or contractor. Locate anywhere. Best of references. At present in charge of power, refrigerating and water works plants, plumbing, painting, carpenter work and maintenance of al mechanical and electrical equipment. Address stating salary, Capt. J. Lucas Jr., Engineering Quartermaster, Marine Barracks, Quantico, Va.

MECHANICAL engineer (38); technical school and 15 years' experience, mainly mill engineering, including buildings. Can design important work. PW-782, Eng. News-Record.

MECHANICAL engineer, 33, technical education; six years' in manufacture and installation of fireproof and safety appliances; one year reinforced concrete; three years manufacturing cranes, derricks and hoisting machinery, chief engineer two years. Thirteen years' concurrent experience in care of automobile, marine and stationary gas engines. Desires responsible position with modern plant in South or Middle West. PW-738, Eng. News-Record.

Get your Wants
into the Searchlight

POSITIONS WANTED

MECHANICAL engineer with broad education and nine years' experience, largely steam power plant testing and reports, desires change to permanent, responsible position, regardless of location. Minimum salary considered, $2400. PW-710, Eng. News-Record.

MECHANICAL engineering executive who can supervise designs, organize and handle men invites eastern interview. Twelve years' experience. A1. New York credentials. PW-669 Eng. News-Record.

Civil Engineers

CIVIL mechanical engineer open for an engagement March 15th. Technical graduate; 35; thirteen years' experience field and office. designing and supervising construction. Five years with engineering department, Pennsplvania Railroad. Past eight years designing and constructing industrial and power plants. months. Highest references. Would consider engagement for South America, Cuba, or Mexico. Personal interview sought. PW-812, Eng. News-Record.

CIVIL engineer (degree); five years' field and office experience on construction and design of buildings, subways, highways; location, N. Y. City. PW-838, Eng. News-Record.

CIVIL engineer, 26; graduate; married; 3 years construction; 2 years railway and industrial valuations; good estimator and draftsman. Available immediately. PW-839, Eng. News-Record.

CIVIL engineer, technical graduate, 2 years subway construction, 1 year structural design. Recently with building department, just released from active service United States Navy. desires position affording advancement. Available immediately. PW-800, Eng. News-Record.

CIVIL engineer, graduate; with 14 years' field and office experience, surveying, drafting, estimating, inspecting, desires position with builder or contractor. Moderate salary to start. PW-844, Eng. News-Record.

CIVIL engineer, 30; Columbia graduate; drafting, designing, estimating; experience on steel and concrete structures, desires position with engineers or contractors. PW-843, Eng. News-Record.

POSITIONS WANTED

CIVIL engineer, technical education; 4 years' experience drafting, highway work, checking estimates; discharged as sergeant. F. F. B., Malone, N. Y.

CIVIL engineer, 15 years' experience; piers, docks, highways, railroads, hydro-electric development. Now employed on Government work; available on short notice. PW-678, Eng. News-Record, Philadelphia.

CIVIL engineer, graduate, experienced in highway design, construction and maintenance; sewer design, construction and maintenance; water works construction, general design, and general city engineering. Available at once. PW-614, Eng. News-Record.

CIVIL engineer—Technical graduate, 10 years broad field and office experience—railroad, subway, construction, municipal work. Available immediately. Highway or municipal work preferred. PW-611, Eng. News-Record.

CIVIL engineer, 22, released from service, desires any kind of work where technical training may be used to advantage. Two years' general construction experience. PW-622, Eng. News-Record.

CIVIL engineering graduate, 31; married; wishes Philadelphia location. Last 6 years as inspecting engineer on asphalt plant and road work. Thoroughly familiar with the various asphalt mixers and testing of asphalts, tars, oils, etc. Engineer, 1848, N. 11th St., Philadelphia, Pa.

CIVIL engineer, ex-soldier, 26, technical education, 5½ years field and office. Two years in charge of contract work, subways. Experienced in steel dredge and chemical plant construction. Capable surveyor, estimator, draftsman ,superintendent. Construction or sales work desired, location immaterial. PW-717, Eng News-Record.

CIVIL engineer, Mem. Am. Soc. Civil Engineers; 44; experience hydraulics, water power, shafts, tunnels, foundations, locks, dams, surveys; over 20 years responsible charge; past year Major Engineers; Chicago interview; salary, $4000. PW-689, Eng. News-Record, Chicago.

CIVIL engineer, ten years' surveys, investigations, development of mines, water power, lands and timber projects in northern Canada, wishes connection with development or construction company with interests there. PW-741, Eng. News-Record.

STUDY BY MAIL

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Structural Drafting

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M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: March 11.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS
NOTICE TO CONTRACTORS

Albany, February 10th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., unti ltwelve o'clock noon of Tuesday, March 11th, 1919, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 190
Erie Canal—Section 9

For completing the canal from King's Bend to the Lehigh Valley railroad crossing at Rochester.

Sheets 1 to 14, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON.
Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: March 18.

Grading Boulevard

Kansas City, Mo.

Bids will be received by the Board of Park Commissioners of Kansas City, Missouri, up to 2 o'clock March 18th, 1919, at their office, for the grading of Van Brunt Boulevard from the north line of Van Brunt Boulevard along 12th Street, to the north line of Linwood Boulevard. Deposit in the sum of $1500.00, cash or certified check made payable to the City Comptroller, will be required with each bid. Plans, specifications and form of contract can be seen at the office of the Board. The Board reserves the right to reject any or all proposals, and contract may be let to the lowest and best bidder. Additional information furnished upon application to T. C. Harrington, Secretary.

OFFICIAL PROPOSALS

Bids: March 25.

Steel Pipe and Appurtenances

Jersey City, N. J.

Sealed proposals for furnishing and laying, complete, 34,590 ft. of 72-in. riveted steel pipe and appurtenances, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N. J., Tuesday, March 25, 1919, at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal forms, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, or may be obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

he Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Dated: Feb. 18, 1919.

Bids: March 10.

Grading and Paving Roadways

KNOX COUNTY COM'S. OFFICE

Mt. Vernon, Ohio.

Sealed proposals will be received at the office of the County Auditor Mt. Vernon, Ohio, until 1 o'clock P.M., Monday, March 10, 1919, for improvements in:

Hilliar Twp., Knox Co., on Sec. "A" of the Centerburg-Croton Road. For constructing culverts and bridges, grading roadway and paving with tar-bound macadam. Width: Pavement, 14 ft. Roadway, 26 ft. Length, 9436.5 ft., or 1.78 miles.

Estimated cost of construction, $40,691.68.

Date set for completion, Nov. 1, 1919.

The bidder must submit a proposal and contract bond for an amount equal to the amount of the estimated cost.

Plans and specifications are on file in the office of the County Surveyor and the County Auditor.

The County Commissioners reserve the right to reject any or all bids.

A. D. RINEHART, County Auditor.
Dated: February 11, 1919.

OFFICIAL PROPOSALS

Bids: March 10.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by Road Committee of the Board of Chosen Freeholders of the County of Salem, for the building of 4th and 5th Sections of Malaga-Pennsgrove Road, in the township of Pilesgrove in the County of Salem, with a concrete surface, estimated amount of surface pavement required is 41,453 sq.yd., and opened and read in public at the Court House in Salem, on March 10, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and approved by the State Commissioner of Public Roads have been filed in the office of the said Engineer at Salem, N. J., and of said Commissioner at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be inclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY, Clerk.

Bids: March 20.

Road Work—Re-Letting

West Virginia.

Sealed proposals for the construction of the following roads addressed to the County Court of Barbour County, West Virginia and endorsed "Proposals for Construction of Class A Road in Barbour County," will be received by said Court at the office the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 20th day of March, 1919.

The Fairmont and Beverley Turnpike Federal Aid Projects No. 16 and No. 27—Bituminous macadam: 14 ft. wide, 6.5 miles.

The Junior Road—Bituminous macadam: 14 ft. wide, 2.85 miles.

Plans and Specifications may be seen at the office of said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of Barbour County Court,
Philippi, W. Va.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer, Lock Box 1017, Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: March 10.

County Road Works

FAYETTE COUNTY, WEST VIRGINIA

Fayetteville, West Virginia.

Sealed proposals will be received at the office of Clerk of the County Court, Fayetteville, West Virginia, until March 10, 1919, for paving two sections of county highway aggregating 19.5 miles.

Bids will be received for Portland cement concrete, bituminous macadam (penetration) and other improved types of paving. Bids must be made on the blank forms contained in the book of specifications. Specifications and other information can be obtained upon application to J. K. McGrath, County Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

These roads have been graded and drained and are ready for surfacing.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.

J. K. McGRATH, Road Engineer.
Dated February 10, 1919.

Bids: March 20.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A.M., March 20, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 27,520 lineal feet of Reinforced Concrete in Adams Co.; 8984 feet of Bituminous Concrete in Berks Co.; 1842 feet of Vitrified Block in Clarion Co.; 12,636 feet of Bituminous Concrete in Clinton Co.; 8420 feet of Vitrified Block in Columbia Co.; 5745 feet of Bituminous Concrete and Vitrified Block in Delaware Co.; 4566 feet of Vitrified Block in Elk Co.; 49,959 feet of Reinforced Concrete in Erie Co.; 26,112 feet of Reinforced Concrete and Hillside Vitrified Block in Fayette Co.; 34,259 feet of Reinforced Concrete in Greene Co.; 5600 feet of Reinforced Concrete in Lancaster Co.; 4906 feet of Reinforced Concrete in Lawrence Co.; 35,035 feet of Reinforced Concrete in Lehigh Co.; 23,510 feet of Reinforced Concrete in Monroe Co.; 7824 feet of Reinforced Concrete in Tioga Co. and 26,862 feet of Reinforced Concrete in Warren Co. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of the State Highway Department, Harrisburg; 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Philadelphia, Pa.—Sealed proposals will be received here until 12 M., March 11, 1919, and then opened, for dredging in Delaware River, in Philadelphia Harbor and on New Castle, Reedy Island, Baker and Liston Lighthouse Ranges. Further information on application.

OFFICIAL PROPOSALS

Bids: March 19.

Filtration Plant

CONTRACT 27

Hartford, Conn.

Sealed proposals, addressed to the Board of Water Commissioners of the City of Hartford, will be received at the office of the Board, Municipal Building, Hartford, until 12 M., Wednesday, March 19, 1919, for the construction of eight concrete-covered filter beds an aerator and connecting pipe lines.

Plans and specifications may be obtained after March 5 at the office of the Manager and Chief Engineer, on deposit of $10 which will be refunded on the return, in good condition, of both plans and specifications. Specifications used in making a bid will be considered as returned. Prior to March 5 plans may be seen at the office of the Manager and Chief Engineer and the site of the work visited.

A certified check or cashier's check for $25,000 must accompany each bid and the successful bidder will be required to furnis . bonds in the sum of $400,000.

The right is reserved to reject any and all bids.

BOARD OF WATER COMMISSIONERS
FRANK E. HOWARD, President.
FRED D. BERRY, Secretary.
CALEB MILLS SAVILLE
Manager and Chief Engineer,
Pilgard Building, 1026 Main Street,
Hartford, Conn.

Bids: March 10.

Sanitary Sewers

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, N. C., for the construction of vitrified pipe sanitary sewers, until 3:00 o'clock P.M., March 10, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

The work consists of the following:

Alston Ave. Outfall....	11,159 feet—	12 inch
Alston Ave. Outfall....	936 feet—	8 inch
Main, Morris, Watkins and Spring Streets...	2,760 feet—	8 inch
Main Street House Connections	8,400 feet—	6 inch
Neuse River Outfall...	12,100 feet—	24 inch

Plans and specifications of the proposed work may be had at the office of the City Engineer between the hours of 9:00 A.M. and 5:00 P.M., from February 18th, 1919, to March 10th, 1919.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor.
GEO. W. WOODARD, City Clerk.
J. L. MOREHEAD, City Attorney.
H. W. KUEFFNER, City Engineer

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 26, 1919.—Sealed proposals will be opened in this office at 3 p.m., April 15, 1919, for the installation complete of three electric triplex elevator pumps, etc., in the United States courthouse, customhouse, and post office at Omaha, Nebr., in accordance with the drawing and specification, copies of which may be had at this office in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

N. B.—Bidders are required to return the drawing and specification without marks, notes, or other mutilations.

The Government frank sent to inteding bidders is to be used for the return of the drawing and specification and for no other purpose.

Bids: March 20.

Water-Works Tunnel

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS

Milwaukee, February 28, 1919.

Sealed proposals will be received at this office until March 20th, 1919, at 10:30 A.M. for furnishing all materials and doing all the work necessary and required for constructing the Water Pipe Tunnel under Menomonee River, West Water Street to Reed Street, and two shafts, and for laying a connecting Water Pipe Line at locations as shown on the plans.

This contract requires the construction of approximately one hundred eighty-one (181)' lineal feet of steel encased concrete shafts, ten (10) feet in internal diameter, two hundred sixty eight (268) lineal feet of reinforced concrete lined tunnel under the bed of the Menomonee River, seven (7) feet by nine (9) feet in internal dimensions. It also requires the placing of about four hundred forty (440) lineal feet of twenty-four (24) inch diameter cast iron water pipe in the shafts and tunnel, and about seven hundred sixty-five (765) lineal feet of twenty-four (24) and twenty (20) inch diameter cast iron water pipe laid in trenches from the shafts to the connecting water mains in Reed Street and Third Street extended, all as shown on the plans and described in the specifications now on file in the Office of the City Engineer.

The time allowed for the completion of this contract shall be seven (7) months from the date of the Engineer's notice to begin work.

Bidders are required to furnish bid bonds in the penal sum of $24,000.00 or in lieu thereof, the bidder may deposit with the Commissioner of Public Works the sum of $12,000.00 in money or certified bank check, payable to the Commissioner of Public Works, failing in which his bid will be rejected.

The Commissioner of Public Works reserves the right to reject any or all bids.

Full sets of plans will be sent to any Contractor desiring to bid, upon the receipt of Ten Dollars ($10.00). Said sum shall be returned by the City after the set of plans are returned in good condition to the City Engineer.

PERCY BRAMAN,
Dep. Commissioner of Public Works.
Countersigned.
L. M. KOTECKI,
Comptroller.

Bids: March 27.

Concrete Bridge

OFFICE OF BOARD OF PUBLIC WORKS
City of Janesville, Wis.

Sealed proposals will be received at this office until March 27th, 1919, for the construction of a reinforced Concrete Bridge over Rock River on Jackson Street consisting of six 54 foot spans 55 feet wide in accordance with plans and specifications, plans and details on file in this office. A certified check for 5% of bid required. Copies of official notice, specifications and form of contract and bond furnished on application.

C. L. VALENTINE, Chairman.
C. V. KERCH, City Engr.
Feb. 24. 1919.

PROPOSALS FOR SOUTH WING SOUTH CADET Barracks and Guard House, Office Qaurtermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., March 27, 1919, and then opened, for construction of South Wing South Cadet Barracks and Guard House. Information on application.

Bids: March 19.

Furnishing and Erecting Thirty Million Gallon Turbo-Centrifugal Pump and Auxiliary Equipment for Mount Royal Pumping Station

Baltimore, Md.

Sealed proposals in duplicate endorsed bids for furnishing and erecting 30,000,000 gallon turbo-centrifugal pump for Mt. Royal Pumping Station will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon, Wednesday, March 19, 1919.

Plans and specifications can be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after March 1, 1919. A charge of five dollars ($5) will be made for each set of plans and specifications; this amount will be refunded upon the return of these plans and specifications in good condition before March 26, 1919. Specifications used in making a bid will be considered as returned.

A certified check of the bidder on a clearing-house bank made payable to the Mayor and City Council of Baltimore, for the sum of five thousand dollars ($5000) will be required with each bid.

The extent of the work is approximately as follows:

> For furnishing and erecting one 30,000,000 gallon turbine driven centrifugal pump; reduction gearing; condenser and auxiliaries, including condensate and air removal pumps.

The successful bidder will be required to give bond to comply with the City Charter respecting contracts.

While bids are asked for on the various items the contract will be let as a whole.

The Board of Awards reserves the right to reject any or all bids and to waive technical defects if in its judgment it is to the best interest of the city to do so.

WALTER E. LEE,
Water Engineer.

Approved:
J. BARRY MAHOOL,
Acting Pres. Board of Awards.

Bids: March 20.

Pavement Construction

Logan, Iowa.

Sealed proposals will be received by the undersigned until 8 o'clock, P.M., March 20, 1919, for the work of constructing approximately 60,000 square yards of concrete or monolithic brick pavement, 40,000 linear feet of concrete curb and gutter, and a storm sewer system, etc.

Plans, profiles, specifications and form of proposal, contract and bond may be seen at the office of the undersigned, and may be obtained from the engineer upon receipt of $10.00, which will be returned upon return of plans, etc., in good condition.

HERBERT WESSELS, Clerk.
Logan, Iowa.
C. L. HUFF, Engineer,
Logan, Iowa.
March 3, 1919.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

Bids: March 15.

Laboratory Construction Work

Albany, N. Y.

Sealed proposals for Construction Work—Sterile Rooms, Media Hood, Refrigerator, Cupboards and Shelvings, Electric Dumb Waiters and Electric Clock System, Laboratory Building, Division of Laboratories, State Department of Health, Albany, N. Y., will be received by Dr. H. M. Biggs, Commissioner of Health, State Department of Health, Albany, N. Y., until 11 o'clock A.M. on Saturday, March 15, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3195, 3173 and 3175. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: February 24. 1919.

Dam Construction

Gilboa, N. Y.

Plans and specifications for the Gilboa dam are in course of preparation and a contract for this work will be advertised as soon as conditions warrant.

This dam, which will form the Schoharie Reservoir of the Catskill Water Supply, will be a cyclopean masonry overfall structure wit han earth wing, spillway channel and appurtenances. It will be built across Schoharie Creek, in the Town of Gilboa, about 4 miles northeast from the Town of Grand Gorge on the Ulster & Delaware Railroad.

Interested contractors may obtain preliminary information at the office of the Chief Engineer of the Board of Water Supply, 22d floor, Municipal Building, New York City.

Bids: March 17

Eleven Miles of Railroad

Tillamook County, Oregon.

Bids will be received up to March 17th, 1919, and contract will be awarded March 22, 1919, by this company for the construction of about eleven miles of standard gauge railroad in Tillamook County, Oregon. Proposals, maps and all data necessary for intelligent estimates can be had by addressing or calling A. P. Cole, Chief Engineer, 904 Lewis Building, Portland, Oregon, (or c/o Bay City P. O., Oregon).

THE WHITNEY COMPANY

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

Bids: March 18.

Bituminous Materials

State of New York.

State of New York, Office of the State Commission of Highways, Albany, N. Y.—Pursuant to the provisions of Chapter 30, Laws of 1909, as amended by Chapter 646, Laws of 1911, and Chapter 80, Laws of 1913, sealed proposals will be received by the undersigned for furnishing and delivering bituminous materials f.o.b. cars at destination, for use by the State Highway Department in the maintenance and repair of improved State and County Highways in all of the counties of the State unless otherwise specified, at the office of the State Commission of Highways, 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. on Tuesday, the 18th day of March, 1919, for the following contracts:

B. M. Contract No. 1—Bituminous Material Cold Patch Asphaltic Emulsion in Divisions Nos. 1, 2, 3, 4 and 5.

B M. Contract No. 2—Bituminous Material Cold Patch Asphaltic Emulsion in Divisions Nos. 6, 7, 8 and 9.

B. M. Contract No. 3—Bituminous Material Asphaltic Cut-Back.

B. M. Contract No. 4—Bituminous Material A. Binder.

B. M. Contract No. 5—Bituminous Material A. Light Cold Oil and Light Hot Oil.

B. M. Contract No. 6—Bituminous Material T. Cold Patch.

B. M. Contract No. 7—Bituminous Material T. Binder and Cold Application.

All proposals except Contracts Nos. 1 and 2 will be for furnishing the specified material at any railroad delivery point within this state. Proposals for Contracts 1 and 2 will be for furnishing that specified material at any railroad point within the counties comprising the divisions named in the proposal.

Tables showing approximate quantities and railroad delivery point specifications and proposals may be obtained at the office of the State Commission of Highways at Albany, N. Y.

Each proposal must be accompanied by cash or certified check payable to the order of the State Commission of Highways for an amount equal to at least five per centum of the amount of the proposal which such cash or check accompanies. This cash or check will be held by the Commission until the contract is executed and the bond is filed. The successful bidder on each proposal will be required to give a bond for fifty per centum of the amount of the contract, such bond to be executed by a surety company to be approved by the Commission. The bond is for the purpose of insuring the delivery of the bituminous material as called for by the Commission. The right is reserved to reject any or all bids.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 12, 1919, for constructing about 450,000 cu.yd. of earthwork (354,000 cu.yd. hydraulic fill in old borrow pits, and 96,000 cu.yd. levee enlargement) in the Sny Island Levee Drainage District, Ill. Further information on application.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

Bids: March 18.

Concrete Viaduct Construction

Knoxville, Tenn.

Sealed bids will be received until March 18, 1919, 10:00 A.M. by the Board of Commissioners of Knoxville, Tennessee, for the construction of a reinforced concrete viaduct over the Southern Railway tracks on Gay Street; approximate cost, $200,000. Plans and specifications on file in City Engineers office. Right reserved to reject any and all bids.

ROBERT P. WILLIAMS,
City Recorder.

JOHN W. FLENNIKEN,
Com'r. Sts. & Pb. Imp.
J. B. M. McCALLA,
City Engineer.

Bids: March 21.

Sewers

Granite City, Ill.

Bids will be received by the Board of Local Improvements of the City of Granite City, Illinois, at the hour of two o'clock p.m., March 21, 1919, at the City Hall in Granite City, Ill.

Estimated 18,000 lin.ft. of concrete sewer from nine (9) feet diameter to three feet six inches (3′ 6″) diameter.

Specifications, plans and estimate may be seen at the office of EDMUND HALL, Engineer, First National Bank Building, Granite City, Ill.

Bids: March 26.

Road Work

Marion County, W. Va.

Sealed proposals will be received until 12 o'clock noon March 26th, 1919, by the County Court of Marion County, for the construction of 8.73 miles of brick and concrete roads in Paw Paw, Lincoln and Mannington Districts.

Specifications and instructions to bidders are on file in the County Clerk's Office, and at the office of W. M. Linn, Road Engineer, Fairmont, W. Va.

A certified check in the sum of $500.00 must accompany each bid. The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of
Marion County, W. Va.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

Bids: March 28.

Pavement Reconstruction

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 A.M., March 28, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 21,680 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Armstrong Co.; 10,800 feet of Reinforced Concrete and Hillside Vitrified Brick in Berks Co.; 31,700 feet of Reinforced Concrete in Bradford Co.; 4983 feet of Vitrified Brick in Cambria Co.; 676 feet of Vitrified Brick, also 32,100 feet of Reinforced Concrete and Hillside Vitrified Brick in Centre Co.; 13,740 feet of Reinforced Concrete in Clinton Co.; 17,693 feet of Reinforced Concrete in Crawford Co.; 29,667 feet of Reinforced Concrete and Hillside Vitrified Brick in Elk Co.; 15,918 feet of Bituminous Surface Course on a concrete Foundation in Erie Co.; 20,086 feet of Reinforced Concrete in Franklin Co.; 23,912 feet of Reinforced Concrete in Mercer Co.; 1957 feet of Vitrified Brick in McKean Co.; 28,791 feet of Reinforced Concrete in Northumberland Co.; 11,800 feet of Reinforced Concrete in Potter Co.; and 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren Co. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 25.

Paving

Mt. Olive, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Mt. Olive, N. C., at the Town Hall in Mt. Olive, N. C., until 5 P.M., March 25, 1919, for street improvements.

The work will consist of about:

25,000 sq.yd. of brick, asphalt, bitulithic, or other pavement.
15,000 lin.ft. of granite or concrete curb.
15,000 lin.ft. of concrete gutter.
20,000 sq.yd. of sidewalk.
And the necessary drainage, etc.

It is expected that considerable additional work will be done later.

Proposals must be marked, "Proposal for Street Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2000 as evidence of good faith.

Plans and specifications will be on file at the clerk's office in Mt. Olive and at the office of the engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the engineer at Durham, N. C.

The right is reserved to reject any or all bids.

Specifications will be ready about March 10.

S. J. ROBERTS, Mayor.
M. T. BREAZEALE, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Engineering News-Record

with a circulation of over 32,000 a week, reaches almost every worthwhile contractor, manufacturer and dealer interested in public contracts.

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have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

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This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

The One Nationally Recognized Medium for Proposal Advertising

Engineering News-Record

OFFICIAL PROPOSALS

Bids: March 24.

Road Work

Jefferson County, Texas.

Notice is hereby given that on the 24th day of March, 1919, the Commissioners' Court of Jefferson County, Texas, will receive, open and consider bids on the following Jefferson County roads:

5 miles State Highway No. 3
11 miles State Highway No. 8

Plans, profiles, specifications and estimates are on file in the office of the County Engineer, Court House, Beaumont, Texas, and with the State Highway Department, Austin, Texas.

All proposals to be addressed, sealed and delivered to the County Judge of Jefferson County, Texas, on or before 10 a.m. March 24th, 1919. Mark bids "Highways." Proposals to be accompanied by certified check to an amount equal to approximately five per cent. of the total of the bid. The right reserved to reject any and all bids. A deposit of Five Dollars will be required with request for plans and specifications.

Dated, this the 24th day of February, 1919.

W. M. CARROLL,
County Judge,
Beaumont, Texas.

Bids: March 20.

Plant Operation

Springfield, Massachusetts.

The Board of Supervisors of the Department of Streets and Engineering will receive at room 326, Administration Building, until 12 M., March 20th, 1919, proposals for the operation of the Logan Street plant for the salvage of waste materials. The City collects about 8 tons per day and delivers it to the plant without expense to the contracor. The plan is modern in every respect with belt conveyor for sorting, ample storage space, and spur track for loading cars. Further information may be obtained from the S uperintendent of the Department of Streets and Engineers, Administration Building, Springfield, Massachusetts.

ROBERT P. MARSH,
Supt. Dept. Sts. & Engineering.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919. and then opened, for dredging Smyrna River, Del. Further information on application.

OFFICIAL PROPOSALS

Bids: April 4.

Excavating Ditch

Whiteside Co., Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications office of Carl E. Sheldon.

POSITIONS VACANT

A STEAM engineer wanted; capable of taking full charge of electric light plant and pumping station; one 500 kilowatt and one 1000 kilowatt Allis-Chalmers turbine. City 7000 population, located in the middle west. Salary to start, $1800. P-834, Eng. News-Record, Chicago.

ASPHALT plant inspector wanted, capable of making chemical and physical tests on materials, to work in the South. Give in detail training, experience, references and salary, in first letter. P-873, Eng. News-Record.

CIVIL engineer wanted, of practical experience in building concrete and brick State roads. Requirements: Ability to estimate costs, make bids, purchase machinery and assume active general management of such an enterprise. A splendid opportunity for the right man. No one not capable of earning a large salary need answer. Reply in own handwriting stating experience, salary expected and other particulars. Lock Box 395, Erie, Pa.

CONTRACTOR'S superintendent. — Must have broad experience in all branches of contracting. Write experience in detail and state salary. P-853, Eng. News-Record, Chicago.

DEPARTMENTAL sales manager wanted for prominent established company located in Ohio, and manufacturing steel sash and steel doors. Men with experience in handling selling organization, and preferably with a knowledge of structural and ornamental iron. Good salary paid to right party. P-857, Eng. News-Record.

FIRST class structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution. State experience in full giving names of past employers and character of work with each. Experience must have included detailing structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location middle west. P-864, Eng. News-Record, Chicago.

SALES ENGINEER, thoroughly trained in estimating and designing reinforced concrete. P-887, Eng. News-Record.

POSITIONS VACANT

GRADUATE engineer wanted, experienced in reinforced concrete design, by large distributors of reinforcing steel. Permanent position and good chance for advancement, depending on ability. P-905, Eng. News-Record.

MAN wanted with sufficient training and experience to qualify him to take charge of an ornamental shop, employing about fifty (50) men, fabricating stairs, fire escapes and other ornamental iron work; one who is capable of supervising machine shop employing twenty (20) men in conection with ornamental work given preference. P-736, Eng. News-Record.

MAP draftsman and instrument men wanted for land and irrigation development in southwest Texas. Reply stating age, education, experience and salary expected; address Construction Engineer, American Rio Grande Land & Irrigation Company, Mercedes, Texas.

PRACTICAL quarry man wanted, capable taking full charge; one who is familiar with southern conditions and experienced in Sandstone, Limestone and Granite. In reply, give complete record, age, experience, capacity, references. P-755, Eng. News-Record, Chicago.

STRUCTURAL estimator wanted. Require a first class experienced man who knows this work and can design, estimate and obtain contracts for fabricated, structural and plain material. Mostly in the building line and on medium size contracts. An excellent position is offered to one who can qualify with a large organization on a salary and commission basis. Kindly give us a record of your experience and salary required. Location, Cleveland, Ohio. All replies confidential. P-861, Eng. News-Record, Cleveland.

SUPERINTENDENT, foremen, wanted, able to get results, for grading and concrete mixer gangs. Rollermen, pumpmen, cranemen, Keystone men. Dinky engineer and trainmen, auto truck operators, commissary man, cook, etc., for early start. State age, experience, references, wages in first letter. Also camp complete for 75 to 100 men. P-807, Eng. News-Record.

THEW shovel operator required for permanent position in Latin-American country; to also oversee operation of stone crushers and road rollers. Salary $200 and traveling expenses to job. Knowledge of Spanish not essential but desirable. Opportunity to become Master Mechanic. P-904, Eng. News-Record.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

TWO engineers wanted for work in South, capable of taking charge of municipal paving program, including extension water and sewers. Give in first letter experience in detail, references and salary. Graduate engineers only. P-868, Eng. News-Record.

WANTED in Minneapolis, engineer to estimate, design and sell reinforcing bars for building construction; salary and percentage to right party. P-888, Eng. News-Record, Chicago.

GENERAL contractor's office man.--Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully and state salary. P-854, Eng. News-Record, Chicago.

HYDRAULIC DREDGING
WANTED

Prices for contract to dredge 250,000 meters of sand on coast near Havana, Cuba; for further particulars apply

Compania Urbanizadora del Parque y Playa de Marianao
E. Beato Fowler, Chief Eng.
Playa de Marianao, Habana, Cuba

Contractors—this is for you!
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HARMON V. SWART
19 Liberty Street, New York City

Bids: April 3.

Flood Protection Work

Newport, Arkansas.

Sealed proposals will be received by the Board of Directors of the Newport Levee District, Jackson County, Arkansas, at Newport, Arkansas, until 2 o'clock P.M., April 10, 1919, for the construction of flood protection works, involving approximately the following principal quantities:

Earth embankment	297,500	cu.yd.
Concrete	2,150	cu.yd.
Reinforcing steel	65	tons
Miscellaneous cast iron and steel	5	tons
Wood sheet piling......	116	M. ft. B.M.
Tile, 4 in. and 10 in. diameters	8,270	lin.ft.
Corrugated iron pipe—18 in. and 24 in. diameters	550	lin.ft.
Cast iron or concrete pipe, 24 in. and 36 in. diameters	290	lin.ft.
Sluice gates, 24 in. diam.	4	
36 in. diam.	4	
48 in. diam.	2	
Sodding embankments ..	162,800	sq.yd.

The work is divided into three sections and proposals will be received for the entire work or for any section or combination of sections. Proposals must be submitted on the form furnished by the Board and must be accompanied by a certified check, payable to the Treasurer of the Newport Levee District, for not less than 5 per cent of the total amount of the bid, but in no case need the certified check exceed $5000.

Payments for the work will be made in cash.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF DIRECTORS NEWPORT
LEVEE DISTRICT.
By C. R. HITE, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: March 25.

Concrete Pavement

Longmont, Colo.

Sealed proposals for the construction of approximately 15,300 sq.yd. of concrete pavement with 3300 cu.yd. of grading and 6400 lin.ft. of concrete curb, in the Longmont Paving District Number 3, will be received by the City Clerk at his office at the City Hall, Longmont, Colorado, until 5 o'clock P.M., **Tuesday**, March 25, 1919.

Plans, specifications, proposal and contract may be obtained at the office of the City Clerk or the City Engineer.

The City Council reserves the right to reject any or all bids.

GEO. H. STONEX,
City Clerk.

E. S. BICE,
City Engineer.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 110,000 cubic yards of earthwork (75,000 cubic yards hydraulic fill in old borrow pits; and 35,000 cubic yards levee enlargement) in the Hunt Drainage District, Ill. Further information on application.

Bids: March 21.

Highway Reconstruction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the reconstruction under the provisions of the Federal Aid Road Act of a section of State highway 1.15 miles in length and located upon the Boston Neck Road in the Town of Narragansett will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M., on Friday, March 21, 1919, at which time they will be opened and read in public.

The principal quantities involved are as follows:

Earth excavation	3,400 cu.yd.
Crushed stone	4,000 tons
Hauling, heating and applying asphalt	30,000 gallons
Gravel foundations	2,800 cu.yd.

Bids must be made upon blank forms to be furnished by the board.

No bids will be received unless accompanied by a certified check for the sum of $200, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 10, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 noon.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
MICHAEL VAN BEUREN,
J. HENRY WOODWARD.

Bids: March 26.

River Improvements

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 3 P.M., on March 26, 1919, for the work of improvement of the Cottonwood River and its tributaries.

Approximate estimate of work to be done:

New channel excavation (cu.yd.)...	968,000
Exacavation from present channels (cu.yd.)	160,000
Levee embankment (cu.yd.)........	130,000
Removal of obstructions other than earth from present channels (lin. ft.)	56,000

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division ocvered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Building, Kansas City, Mo.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

Bids: March 28.

Pavement Reconstruction

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 A.M., March 28, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 21,680 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Armstrong Co.; 10,800 feet of Reinforced Concrete and Hillside Vitrified Brick in Berks Co.; 31,700 feet of Reinforced Concrete in Bradford Co.; 4983 feet of Vitrified Brick in Cambria Co.; 676 feet of Vitrified Brick in Centre Co.; 13,740 feet of Reinforced Concrete in Clinton Co.; 17,693 feet of Reinforced Concrete in Crawford Co.; 29,667 feet of Reinforced Concrete and Hillside Vitrified Brick in Elk Co.; 15,918 feet of Bituminous Surface Course on a concrete Foundation in Erie Co.; 20,086 feet of Reinforced Concrete in Franklin Co.; 23,912 feet of Reinforced Concrete in Mercer Co.; 1957 feet of Vitrified Brick in McKean Co.; 28,791 feet of Reinforced Concrete in Northhampton Co., 2834 feet of Reinforced Concrete in Northumberland Co.; 11,800 feet of Reinforced Concrete in Potter Co.; and 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren Co. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 26.

Road Work

Marion County, W. Va.

Sealed proposals will be received until 12 o'clock noon March 26th, 1919, by the County Court of Marion County, for the construction of 8.73 miles of brick and concrete roads in Paw Paw, Lincoln and Mannington Districts.

Specifications and instructions to bidders are on file in the County Clerk's Office, and at the office of W. M. Linn, Road Engineer, Fairmont, W. Va.

A certified check in the sum of $500.00 must accompany each bid. The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of
Marion County, W. Va.

Bids: March 18.

Concrete Viaduct Construction

Knoxville, Tenn.

Sealed bids will be received until March 18, 1919, 10:00 A.M. by the Board of Commissioners of Knoxville, Tennessee, for the construction of a reinforced concrete viaduct over the Southern Railway tracks on Gay Street; approximate cost, $200,000. Plans and specifications on file in City Engineers office. Right reserved to reject any and all bids.

ROBERT P. WILLIAMS,
City Recorder.

JOHN W. FLENNIKEN,
Com'r. Sts. & Pb. Imp.
J. B. M. McCALLA,
City Engineer.

Bids: March 20.

Water-Works Tunnel

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS

Milwaukee, February 28, 1919.

Sealed proposals will be received at this office until March 20th, 1919, at 10:30 A.M. for furnishing all materials and doing all the work necessary and required for constructing the Water Pipe Tunnel under Menomonee River, West Water Street to Reed Street, and two shafts, and for laying a connecting Water Pipe Line at locations as shown on the plans.

This contract requires the construction of approximately one hundred eighty-one (181)' lineal feet of steel encased concrete shafts, ten (10) feet in internal diameter, two hundred sixty eight (268) lineal feet of reinforced concrete lined tunnel under the bed of the Menomonee River, seven (7) feet by nine (9) feet in internal dimensions. It also requires the placing of about four hundred forty (440) lineal feet of twenty-four (24) inch diameter cast iron water pipe in the shafts and tunnel, and about seven hundred sixty-five (765) lineal feet of twenty-four (24) and twenty (20) inch diameter cast iron water pipe laid in trenches from the shafts to the connecting water mains in Reed Street and Third Street extended, all as shown on the plans and described in the specifications now on file in the Office of the City Engineer.

The time allowed for the completion of this contract shall be seven (7) months from the date of the Engineer's notice to begin work.

Bidders are required to furnish bid bonds in the penal sum of $24,000.00 or in lieu thereof, the bidder may deposit with the Commissioner of Public Works the sum of $12,000.00 in money or certified bank check, payable to the Commissioner of Public Works, failing in which his bid will be rejected.

The Commissioner of Public Works reserves the right to reject any or all bids.

Full sets of plans will be sent to any Contractor desiring to bid, upon the receipt of Ten Dollars ($10.00). Said sum shall be returned by the City after the set of plans are returned in good condition to the City Engineer.

PERCY BRAMAN,
Dep. Commissioner of Public Works.
Countersigned.
L. M. KOTECKI,
Comptroller.

Bids: March 20.

Plant Operation

Springfield, Massachusetts.

The Board of Supervisors of the Department of Streets and Engineering will receive at room 326, Administration Building, until 12 M., March 20th, 1919, proposals for the operation of the Logan Street plant for the salvage of waste materials. The City collects about 8 tons per day and delivers it to the plant without expense to the contracor. The plan is modern in every respect with belt conveyor for sorting, ample storage space, and spur track for loading cars. Further information may be obtained from the S uperintendent of the Department of Streets and Engineers, Administration Building, Springfield, Massachusetts.

ROBERT P. MARSH,
Supt. Dept. Sts. & Engineering.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

Bids: March 25.

Paving

Mt. Olive, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Mt. Olive, N. C., at the Town Hall in Mt. Olive, N. C., until 5 P.M., March 25, 1919, for street improvements.

The work will consist of about:

25,000	sq.yd. of brick, asphalt, bitulithic, or other pavement.
15,000	lin.ft. of granite or concrete curb.
15,000	lin.ft. of concrete gutter.
20,000	sq.yd. of sidewalk.

And the necessary drainage, etc.

It is expected that considerable additional work will be done later.

Proposals must be marked, "Proposal for Street Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2000 as evidence of good faith.

Plans and specifications will be on file at the clerk's office in Mt. Olive and at the office of the engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the engineer at Durham, N. C.

The right is reserved to reject any or all bids.

Specifications will be ready about March 10.

S. J. ROBERTS, Mayor.
M. T. BREAZEALE, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: March 20.

Road Work—Re-Letting

West Virginia.

Sealed proposals for the construction of the following roads addressed to the County Court of Barbour County, West Virginia and endorsed "Proposals for Construction of Class A Road in Barbour County," will be received by said Court at the office the Clerk of said Court in Philippi, W. Va., until 1 P.M. on the 20th day of March, 1919.

The Fairmont and Beverley Turnpike Federal Aid Projects No. 16 and No. 27—Bituminous macadam: 14 ft. wide, 6.5 miles.

The Junior Road—Bituminous macadam: 14 ft. wide, 2.85 miles.

Plans and Specifications may be seen at the office of said County Clerk and at the office of the State Road Commission, Charleston, W. Va.

Proposals shall be submitted upon the blank forms to be provided by the undersigned and shall be accompanied by a certified check for at least 5 per cent. of the total amount bid.

The right is reserved to reject any or all bids.

S. F. HOFFMAN,
Clerk of Barbour County Court,
Philippi, W. Va.

Bids: April 4.

Excavating Ditch

Whiteside Co., Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications office of Carl E. Sheldon.

Bids: March 20.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A.M., March 20, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 27,520 lineal feet of Reinforced Concrete in Adams Co.; 8984 feet of Bituminous Concrete in Berks Co.; 1842 feet of Vitrified Block in Clarion Co.; 12,636 feet of Bituminous Concrete in Clinton Co.; 8420 feet of Vitrified Block in Columbia Co.; 5745 feet of Bituminous Concrete and Vitrified Block in Delaware Co.; 4566 feet of Vitrified Block in Elk Co.; 49,959 feet of Reinforced Concrete in Erie Co.; 26,112 feet of Reinforced Concrete and Hillside Vitrified Block in Fayette Co.; 34,259 feet of Reinforced Concrete in Greene Co.; 5600 feet of Reinforced Concrete in Lancaster Co.; 4906 feet of Reinforced Concrete in Lawrence Co.; 35,035 feet of Reinforced Concrete in Lehigh Co.; 23,510 feet of Reinforced Concrete in Monroe Co.; 7824 feet of Reinforced Concrete in Tioga Co. and 26,862 feet of Reinforced Concrete in Warren Co. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of the State Highway Department, Harrisburg; 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: March 24.

Road Work

Jefferson County, Texas.

Notice is hereby given that on the 24th day of March, 1919, the Commissioners' Court of Jefferson County, Texas, will receive, open and consider bids on the following Jefferson County roads:

5 miles State Highway No. 3
11 miles State Highway No. 8

Plans, profiles, specifications and estimates are on file in the office of the County Engineer, Court House, Beaumont, Texas, and with the State Highway Department, Austin, Texas.

All proposals to be addressed, sealed and delivered to the County Judge of Jefferson County, Texas, on or before 10 a.m. March 24th, 1919. Mark bids "Highways." Proposals to be accompanied by certified check to an amount equal to approximately five per cent. of the total of the bid. The right reserved to reject any and all bids. A deposit of Five Dollars will be required with request for plans and specifications.

Dated, this the 24th day of February, 1919.

W. M. CARROLL,
County Judge,
Beaumont, Texas.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 19, 1919, for constructing about 290,000 cubic yards of earthwork (210,000 cubic yards hydraulic fill in old borrow pits; and 80,000 cubic yards levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: March 26.

Highway Construction

THE STATE OF DELAWARE
Dover, Delaware.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock P. M., March 26, 1919, and at that place and time publicly opened, for the construction of 0.5 miles of State Highway (Vitrified Brick) in New Castle County, Delaware, involving the following approximate quantities:

3400 cu.yd. grading.
800 lin.ft. pipe underdrain.
5000 lin.ft. concrete curb.
1800 cu.yd. concrete foundation.
11,500 cu.yd. vitrified brick pavement.
4 bounds.
10 catch basins.
5 drop inlets.
1880 tons stone ballast for street railway.
990 lin.ft. 12 in. vitrified pipe sewer.
1250 lin.ft. 18 in. vitrified pipe sewer.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before November 1, 1919.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) percentum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 9."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after March 5, 1919, upon deposit of ($10) ten dollars which amount will be refunded upon return of plans and specifications in good condition, at the office of

CHAS. M. UPHAM, Chief Engineer,
State Highway Department,
Dover, Delaware.

NOTE—Lettings for the construction of State Highways will be advertised every two weeks until approximately 75 miles are under contract.

Bids: March 20.

Pavement Construction

Logan, Iowa.

Sealed proposals will be received by the undersigned until 8 o'clock, P.M., March 20, 1919, for the work of constructing approximately 60,000 square yards of concrete or monolithic brick pavement, 40,000 linear feet of concrete curb and gutter, and a storm sewer system, etc.

Plans, profiles, specifications and form of proposal, contract and bond may be seen at the office of the undersigned, and may be obtained from the engineer upon receipt of $10.00, which will be returned upon return of plans, etc., in good condition.

HERBERT WESSELS, Clerk.
Logan, Iowa.

C. L. HUFF, Engineer,
Logan, Iowa.
March 3, 1919.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), March 24, 1919, and then opened, for furnishing and delivering valve-operating machinery for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: March 27.

Pier Construction

Philadelphia, Pa.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Wolf Street Pier, No. 82 South, and Orter Street Pier, No. 84 South," will be received until 12 o'clock noon, Thursday, March 27, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of $25 to cover cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition and **unmarked.** The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation and insured his liability thereunder or secured exemption therefrom.

No bids will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500, have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

Bids: April 3.

Road Work

Flemington, N. J.

The Board of Chosen Freeholders of Hunterdon County will receive bids at their rooms, Flemington, N. J., on April 3d, 1919, up to the hour of 11 o'clock A.M., for resurfacing a portion of the Ringoes-Woodsville Road in said County.

Length	2.457 miles
Broken stone	2250 tons
Filler	700 tons
Dustless screenings...	400 tons
Tarvia B	15135 gallons

Specifications may be obtained from Grant Davis, County Engineer, Whitehouse Station, N. J., and will be on file at the office of H. L. Stout, County Solicitor, Flemington, N. J.

By order of the Board of Chosen Freeholders.

DAVID L. HOLCOMBE,
Director.
EDWARD H. WILSON,
WM. B. WEAN.

Bids: April 1.

Road Materials

Columbus, Ohio.

Bids will be received up until 2:00 P.M., April 1, 1919, at the office of the State Highway Commissioner, Columbus, Ohio, for stone, gravel, slag and sand to be used in maintaining and repairing state roads during 1919. Quotations will be placed on file and material ordered from time to time during the season as needed. Price at quarry and freight rates to various railroad stations are requested. Bidding blanks will be furnished upon request.

CLINTON COWEN,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 9.

Road Improvement

Bergen County, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of Bergen County for the improvement of Williams Avenue, Section No. 2, in the Boroughs of Hasbrouck Heights, Peterboro and Little Ferry in the County of Bergen with a 7½" to 10½" Portland Cement Concrete surface upon a cinder foundation: estimated amount of surface pavement required is 18,647 square yards, of foundation 10,640 cubic yards; and opened and read in public at Court House, Bergen County, New Jersey, on April 9th, 1919, at 2.30 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Road Committee, Bergen County Board of Chosen Freeholders, and must be accompanied by a certified check for not less than 10% of said bid, drawn to the order of the County Collector of Bergen County, N. J., and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of Bergen County Board of Chosen Freeholders.

JAS. M. HARKNESS,
Clerk.

Bids: March 25.

Air Compressor

Marion, Indiana.

Bids for an Air Compressor, according to plans and specifications on file, will be received at Marion, Indiana, on Tuesday, March 25, 1919, at 10 o'clock A.M., by the Board of Public Works.

Further information will be furnished upon request.

T. E. PETRIE, President.
BOARD OF PUBLIC WORKS.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

OFFICE OF THE COMMISSIONERS, D. C., Washington, March 3, 1919.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., Wednesday, March 26, 1919, for grading certain streets, aggregating about thirty thousand cubic yards of grading. Blank forms of proposals, specifications, and all necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, COMMISSIONERS, D. C.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholders' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 8.

Bridge Letting

Greenbrier County, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer, Lock Box 1017, Memphis, Tenn.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Buffalo N. Y., April 1, 1919, 2 o'clock p.m., for 500 bbls. American Portland Cement delivered at Conneaut Harbor, Ohio. Information upon application to the above office.

OFFICIAL PROPOSALS

Bids: April 11.

Deck Steel Girder Bridge

Holyoke, Mass.

The Board of Public Works of Holyoke, Mass., will receive at its office in Holyoke until 10 o'clock in the morning of Friday, April 11, 1919, sealed proposals for the construction of a deck steel girder bridge, the steel work to be encased or covered with reinforced concrete, the bridge to be erected across the first level canal on Appleton Street in said Holyoke. As soon as may be after the above time and at the office of the Board the proposals so received will be publicly opened and read. The bidder will be expected to submit his own specifications and plans covering the work which is to be done in accordance with "General Specifications for Bridge over the First Level Canal Appleton Street, Holyoke, Mass.," prepared by the City Engineer. Full information may be had upon application to the City Engineer, City Hall Annex and Police Building, Holyoke, Mass. A general form of the proposed contract may be seen at the office of the Board. Proposals must be accompanied by a certified bank check in the sum of Five Hundred Dollars ($500) or by lawful money in the same sum. Bids must be addressed to the Chairman marked "Proposals for Appleton Street Bridge," and left at the office of the Board before the time hereinbefore specified. The Board reserves the right to reject any or all bids or to accept any bid that in its opinion may be for the best interests of the City of Holyoke. Oscar C. Ferry, Asst. Clerk, Holyoke, Mass., March 10, 1919.

Bids: April 2.

Sewer Construction

Hamilton, Ont.

Sealed tenders will be received by the undersigned, addressed to Chas. G. Booker, Esq., Mayor; Chairman Board of Control, City Hall, Hamilton, up to 5 o'clock P.M. on Wednesday, April 2, 1919, for the construction of the following work:

A sewer constructed of brick or concrete (alternative tenders for which will be received), 1750 ft. in length, on King Street, Macklin Street and Dundas Street, Hamilton, Ontario.

Tenders must be on forms supplied and plainly marked on the outside as to contents.

Specifications and form of tender for the above can be obtained at the office of the City Engineer, where any other information may be secured.

The lowest or any tender not necessarily accepted.

S. H. KENT,
City Clerk.

Dated March 8, 1919.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 10, 1919.—Sealed proposals will be received at this office until 3 P.M., March 26, 1919, and then opened for miscellaneous alterations in work room and basement of the United States Post Office in Meridian, Miss., in accordance with drawing RHP-701, and the specification, copies of which may be had at the office of the Custodian or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 5, 1919, and then opened, for constructing Pass, Weir, Beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 49.5 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

	Miles
Greenville to head of Lake Washington	20.2
Greenville to Metcalfe	3.4
Leland to Sunflower County line	16.2
Hollandale to Murphy Bayou	5.0
Arcola to Trail Lake	4.7

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD,
Chairman.

Bids: April 2.

Street Paving

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, for the construction of a permanent pavement of approximately 30,000 sq.yd. until 3 o'clock P.M., April 2, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

Plans and specifications of the proposed work may be had at the office of the City Engineer, between the hours of 9 A.M. and 5 P.M., from March 16, 1919 to April 2, 1919. Said specifications provide for the grading, drawing, curbing and paving with some suitable pavement on a six inch concrete base, Main Street from Fuller Street to Alston Ave. and also the submission of bids on 50,000 sq.yd. to 100,000 sq.yd. to be defined later.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its own judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor.
GEO. W. WOODWARD, City Clerk.
J. L. MOOREHEAD, City Attorney.
H. W. KUEFFNER, City Engineer.

Bids: April 1.

Single Light Lamp Poles

Loveland, Colo.

Sealed proposals for the furnishing of approximately 109 ornamental single light lamp poles and 10,000 ft. of three conductor, 600 volt under-ground wire for the City of Loveland, will be received by the City Clerk of the City of Loveland, at its office in the City Hall, until 7:30 o'clock P.M., Thursday, April 1, 1919.

All bids must be on forms provided for the same by the city, and must be accompanied by a certified check in the sum of $250, payable to the Treasurer of the City of Loveland.

Proposal and specifications may be examined at the office of the City Clerk, or will be forwarded upon receipt of application.

The City Council reserves the right to reject any or all bids.

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NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

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have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

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This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

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Engineering News-Record

0052

OFFICIAL PROPOSALS

Bids: March 21.

Bridge Construction

City of Trenton, N. J.

Pursuant to a resolution adopted March 7, 1919, the City Commission will receive at its meeting to be held on March 21, 1919, at 2 o'clock p.m., sealed proposals for the construction of a steel and concrete bridge across the Assanpink Creek, each of Olden Avenue, Trenton, N. J.

Plans and specifications with a draft of the contract and of the bonds required to be given may be obtained at the ocflie of John W. Thompson, Consulting Engineer, Broad Street Bank Building, Trenton, N. J., on payment of ten dollars ($10) which amount will be returned to actual bidders and those returning plans and specifications at or before opening of bids.

The bridge is approximately 14 feet wide with 64 feet span carried on girders, and 20 feet approaches. The work to be completed in three months.

Each proposal must be made on a blank form which will be furnished by the Engineer, and must be accompanied by a certified check to the amount of $500, conditioned that if the proposal be accepted the person or persons making it will execute the contract required to be executed and furnish the bond required to be furnished, within five days after the acceptance of the proposal.

The proposal must not be filed with any city official, but must be delivered by the bidder or his agent to the City Clerk, at the meeting above mentioned, when the same shall be called for by the President of the City Commission.

Said City Commission reserves the right to reject any or all proposals. Contract will be made subject to Chapter 253, laws of New Jersey, 1913.

LEON D. HIRSCH,
City Clerk.

Dated March 10, 1919.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

HYDRAULIC DREDGING

WANTED

Prices for contract to dredge 250,000 meters of sand on coast near Havana, Cuba; for further particulars apply

Compania Urbanizadora del Parque y Playa de Marianao
E. Beato Fowler, Chief Eng.
Playa de Marianao, Habana, Cuba

OFFICIAL PROPOSALS

Bids: April 2nd.

Generating Unit

Macon, Mo.

Sealed bids addressed t oCity Clerk, Macon, Mo., and endorsed Proposals for Power Plant Improvements will be received until 8 P.M., April 2nd, at which time they will be publicly opened and read. The work consists of furnishing and erecting one 400 to 500 KVA Generator Direct connected to Steam Engine or Turbine with condensing equipment, Spray pond or Cooling Tower equipment and Switchboard. Certified check $1500. City reserves the right to reject any or all bids. Specifications may be obtained from Engineer upon receipt of a deposit of $10 of which $8 will be refunded upon return of the specifications.

NAT M. LACY, Mayor.
W. H. MARTIN, City Clerk.
FRANK L. WILCOX, Engineer.
Syndicate Trust Bldg.,
St. Louis, Mo.

POSITIONS VACANT

AN experienced man wanted for resident engineer on road construction in Arkansas. State experience, age, salary expected and references. Address Room 410, Citizens Bank Bldg., Pine Bluff, Ark.

ARCHITECTURAL and engineering specification writer, estimator and checker. Permanent. State age, experience, salary and when available. Address The Mills & Millspaugh, Architects and Engineers, Columbus, Ohio.

BY general contracting firm located in Southwest, young technical graduate wanted. Must be experienced and accurate building estimator, and able to do reinforced concrete designing work. State fully, age, experience, and salary expected. P-957, Eng. News-Record, Chicago.

CONTRACTOR'S superintendent. — Must have broad experience in all branches of contracting. Write experience in detail and state salary. P-853, Eng. News-Record, Chicago.

EXPERIENCED structural steel draftsmen wanted. State experience and salary expected. Address P. O. Box 381, Cleveland, Ohio.

FIRST class structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution. State experience in full giving names of past employers and character of work with each. Experience must have included detailing structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location middle west. P-864, Eng. News-Record, Chicago.

FOREMAN wanted to take charge of lining tunnels; salary open. Pittsburgh & West Virginia Railroad, H. H. Temple, Chief Engineer, Pittsburgh, Pa.

POSITIONS VACANT

GRADUATE engineer wanted, experienced in reinforced concrete design, by large distributors of reinforcing steel. Permanent position and good chance for advancement, depending on ability. P-905, Eng. News-Record.

LARGE fabricating shop in the South desires services of experienced shop inspectors on ship fabrication. State fully past experience and salary desired. P-934, Eng. News-Record, Leader-News Bldg., Cleveland.

MAN wanted with sufficient training and experience to qualify him to take charge of an ornamental shop, employing about fifty (50) men, fabricating stairs, fire escapes and other ornamental iron work; one who is capable of supervising machine shop employing twenty (20) men in conection with ornamental work given preference. P-736, Eng. News-Record.

MAP draftsman and instrument men wanted for land and irrigation development in southwest Texas. Reply stating age, education, experience and salary expected; address Construction Engineer, American Rio Grande Land & Irrigation Company, Mercedes, Texas.

MECHANICAL engineer and draftsman experienced on elevators and hoisting machinery design. Give reference, experience and salary expected. J. G. Speidel, Reading, Pa.

OFFICE assistant on levee and drainage construction job. Must be competent to check reports and payrolls. Position permanent. State age, experience, education, nationality, and salary desired. No replies to rejected applicants. Morgan Engineering Company, 622 Goodwyn Institute, Memphis, Tennessee.

OPERATING and mechanical engineer wanted, with technical education and practical experience, to take charge of our power plant—B. & W. boilers, Corliss compound and turbo engines, surface, condenser, pumps, etc.; $208 per month. Give age, references, and when could report. Good schools and surroundings. Burton-Swartz Cypress Company of Florida, Perry, Fla.

GENERAL contractor's office man. — Must be of the manager type and having had outside experience. Permanent position in Ohio. Write fully and state salary. P-854, Eng. News-Record, Chicago.

PRACTICAL quarry man wanted, capable taking full charge; one who is familiar with southern conditions and experienced in Sandstone, Limestone and Granite. In reply, give complete record, age, experience, capacity, references. P-755, Eng. News-Record, Chicago.

STRUCTURAL estimator wanted. Require a first class experienced man who knows this work and can design, estimate and obtain contracts for fabricated, structural and plain material. Mostly in the building line and on medium size contracts. An excellent position is offered to one who can qualify with a large organization on a salary and commission basis. Kindly give us a record of your experience and salary required. Location, Cleveland, Ohio. All replies confidential. P-861, Eng. News-Record, Cleveland.

SUPERINTENDENT wanted for highway construction in mountains of Tennessee. Steam shovel work; state experience and salary expected. P-933, Eng. News-Record, Philadelphia.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

WANTED first-class highway engineer on sand-clay and gravel-clay roads in Florida. Must be young and active, come well recommended, and furnish transit and a light car. Party will be required to pay present incumbent of the place $350 for placing him and taking the time to initiate the applicant into the job. Salary, $300 per month. Address P-958, Eng. News-Record, Philadelphia.

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OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 3.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Thursday, the 3rd day of April, 1919, for the repair of highways in the following counties:

Albany: One contract, reconstruction.
Broome: One contract, resurfacing.
Delaware: One contract, resurfacing.
Erie: two contracts, resurfacing and reconstruction.
Genesee: One contract, reconstruction.
Hamilton: One contract, resurfacing.
Herkimer: One contract, surface treatment.
Monroe: Two contracts, resurfacing and surface treatment.
Oneida: One contract, resurfacing.
Onondaga: Four contracts, resurfacing.
Saratoga: One contract, reconstruction.

Sealed proposals will also be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Friday, the 4th day of April, 1919, for the repair of highways in the following counties:

Allegany: One contract, surface treatment.
Cayuga: One contract, resurfacing.
Fulton: One contract, surface treatment.
Livingston: Three contracts, surface treatment and reconstruction.
Monroe: One contract, surface treatment.
Montgomery: One contract, surface treatment.
Ontario: Two contracts, reconstruction and surface treatment.
Orleans: One contract, surface treatment.
Otsego: One contract, reconstruction.
Schenectady: One contract, reconstruction.
Schuyler: One contract, surface treatment.
Steuben: Three contracts, resurfacing.
Sullivan: One contract, resurfacing.
Tioga: One contract, surface treatment.
Tompkins: One contract, surface treatment.
Ulster: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the division engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 5, 1919, and then opened, for constructing Pass, Weir, Beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River. Information on application.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: April 11.

Deck Steel Girder Bridge

Holyoke, Mass.

The Board of Public Works of Holyoke, Mass., will receive at its office in Holyoke until 10 o'clock in the morning of Friday, April 11, 1919, sealed proposals for the construction of a deck steel girder bridge, the steel work to be encased or covered with reinforced concrete, the bridge to be erected across the first level canal on Appleton Street in said Holyoke. As soon as may be after the above time and at the office of the Board the proposals so received will be publicly opened and read. The bidder will be expected to submit his own specifications and plans covering the work which is to be done in accordance with "General Specifications for Bridge over the First Level Canal Appleton Street, Holyoke, Mass.," prepared by the City Engineer. Full information may be had upon application to the City Engineer, City Hall Annex and Police Building, Holyoke, Mass. A general form of the proposed contract may be seen at the office of the Board. Proposals must be accompanied by a certified bank check in the sum of Five Hundred Dollars ($500) or by lawful money in the same sum. Bids must be addressed to the Chairman marked "Proposals for Appleton Street Bridge," and left at the office of the Board before the time hereinbefore specified. The Board reserves the right to reject any or all bids or to accept any bid that in its opinion may be for the best interests of the City of Holyoke. Oscar C. Ferry, Asst. Clerk, Holyoke, Mass., March 10, 1919.

Bids: April 1.

Road Materials

Columbus, Ohio.

Bids will be received up until 2:00 P.M., April 1, 1919, at the office of the State Highway Commissioner, Columbus, Ohio, for stone, gravel, slag and sand to be used in maintaining and repairing state roads during 1919. Quotations will be placed on file and material ordered from time to time during the season as needed. Price at quarry and freight rates to various railroad stations are requested. Bidding blanks will be furnished upon request.

**CLINTON COWEN,
State Highway Commissioner.**

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholders' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: March 24.

Road Work

Jefferson County, Texas.

Notice is hereby given that on the 24th day of March, 1919, the Commissioners' Court of Jefferson County, Texas, will receive, open and consider bids on the following Jefferson County roads:

**5 miles State Highway No. 3
11 miles State Highway No. 8**

Plans, profiles, specifications and estimates are on file in the office of the County Engineer, Court House, Beaumont, Texas, and with the State Highway Department, Austin, Texas.

All proposals to be addressed, sealed and delivered to the County Judge of Jefferson County, Texas, on or before 10 a.m. March 24th, 1919. Mark bids "Highways." Proposals to be accompanied by certified check to an amount equal to approximately five per cent. of the total of the bid. The right reserved to reject any and all bids. A deposit of Five Dollars will be required with request for plans and specifications.

Dated, this the 24th day of February, 1919.

**W. M. CARROLL,
County Judge,
Beaumont, Texas.**

OFFICIAL PROPOSALS

Bids: April 9.

Reservoir Completion

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office in the City Hall, until 2 o'clock P.M., on Wednesday, April 9, 1919, for the construction and completion of a 15 million gallon storage basin at Wabash and St. John Avenue, Kansas City, Mo. All proposals shall be based upon and shall be in accordance with the approximate estimate of quantities, and the plans and specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Contract for the excavation of the above basin has been let and work is now proceeding on same. The proposals requested in this advertisement are to cover all other work as shown in the plans and specifications to fully complete the basin.

Proposals shall be made upon the forms attached to specifications and inclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Mo., and marked on the outside: "Proposal for 15 Million Gallon Storage Basin."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or Trust Company, made payable to the City Comptroller, in the amount of $1,500, which deposit shall be forfeited to the city in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

W. G. GOODWIN,
Chief Engineer and Superintendent.

Bids: April 8.

Sanitary Sewers

OFFICIAL NOTICE NO. 5

March 3, 1919.

Published by the authority of the Sewerage Commission of Hagerstown, Maryland, sealed proposals for building intercepting storm and sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured and other localities in the City of Hagerstown, will be received at the office of the Sewerage Commission in the Police Headquarters Building until 7:30, Tuesday, April 8, 1919, at which time and place during the session of the said Commissioners, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 2800 lin.ft. each of 18-in. sanitary and 66-in. storm water sewers with all manholes, inlets, foundations and appurtenances, both largely in tunnel.

On and after Thursday, March 13, 1919, specfications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission and full sets of plans will be sent to any contractor on the receipt of $10, the sum to be returned upon the surrender of the plans in good condition within 30 days from the date of award.

The Sewerage Commission reserves the right to reject any and all bids.

(Signed) E. LEROY HEARD,
Secretary.

(Countersigned) WILLIAM WINGERT,
Chairman.

OFFICIAL PROPOSALS

Bids: March 27.

Pier Construction

Philadelphia, Pa.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Wolf Street Pier, No. 82 South, and Orter Street Pier, No. 84 South," will be received until 12 o'clock noon, Thursday, March 27, 1919, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned, upon the deposit of a certified check in the sum of $25 to cover cost of blue prints, which check will be returned upon the receipt of the plans and specifications in this office in good condition and -marked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation and insured his liability thereunder or secured exemption therefrom.

No bids will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500, have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 49.5 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

	Miles
Greenville to head of Lake Washington	25.2
Greenville to Metcalfe	4.4
Leland to Sunflower County line	10.2
Hollandale to Murphy Bayou	5.0
Arcola to Trail Lake	4.7

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD,
Chairman.

Bids: April 4.

Excavating Ditch

Whiteside Co., Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications' office of Carl E. Sheldon.

OFFICIAL PROPOSALS

Bids: March 26.

River Improvements

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 3 P.M., on March 26, 1919, for the work of improvement of the Cottonwood River and its tributaries.

Approximate estimate of work to be done:

New channel excavation (cu.yd.)	968,000
Exacavation from present channels (cu.yd.)	160,000
Levee embankment (cu.yd.)	130,000
Removal of obstructions other than earth from present channels (lin. ft.)	56,000

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division ocvered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Building, Kansas City, Mo.

Bids: April 11.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, HARRISBURG, PA.

Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., April 11, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 6915 lin.ft. of reinforced concrete, also 43,391 ft. of bituminous surface course on a concrete foundation in Allegheny County; 16,362 ft. of bituminous surface course on a concrete foundation in Bradford County; 8000 ft. of reinforced concrete in Franklin County; 15,020 ft. of reinforced concrete in Fulton County; 20,720 ft. of bituminous surface course on a concrete foundation in Jefferson County; 28,815 ft., also 8916 ft. of bituminous surface course on a concrete foundation in Lackawanna County; 20,366 ft. of bituminous surface course on a concrete foundation in Northumberland County; 29,546 ft. of bituminous surface course on a concrete foundation in Pike County; 9934 ft. of vitrified brick in McKean County, and 6675 ft. of reinforced concrete and Hillside vitrified brick, in Somerset County.

Bids will also be received for the resurfacing with bituminous mixtures on a prepared broken stone base of 39,824 ft. in Berks County, also 35,907 ft. and 38,282 ft. in Lebanon County.

Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg; 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. L. S. Sadler, State Highway Commissioner.

VALVE-OPERATING MACHINERY.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until **11 a.m. (Eastern time), March** 24, 1919, **and then opened, for furnishing** and **delivering valve-operating** machinery for **Dams Nos. 23, 25 and 27, Ohio** River. **Information on application.**

OFFICIAL PROPOSALS

Bids: March 28.

Pavement Reconstruction

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 A.M., March 28, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 21,680 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Armstrong Co.; 10,800 feet of Reinforced Concrete and Hillside Vitrified Brick in Berks Co.; 31,700 feet of Reinforoed Concrete in Bradford Co.; 4983 feet of Vitrified Brick in Cambria Co.; 676 feet of Vitrified Brick in Centre Co.; 13,740 feet of Reinforced Concrete in Clinton Co.; 17,693 feet of Reinforced Concrete in Crawford Co.; 29,667 feet of Reinforced Concrete and Hillside Vitrified Brick in Elk Co.; 15,918 feet of Bituminous Surface Course on a concrete Foundation in Erie Co.; 20,086 feet of Reinforced Concrete in Franklin Co.; 23,912 feet of Reinforced Concrete in Mercer Co.; 1957 feet of Vitrified Brick in McKean Co.; 28,791 feet of Reinforced Concrete in Northhampton Co., 2834 feet of Reinforced Concrete in Northumberland Co.; 11,800 feet of Reinforced Concrete in Potter Co.; and 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren Co. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

OFFICE OF THE COMMISSIONERS, DISTRICT OF COLUMBIA, March 10, 1919.—Sealed proposals will be received at the office of the Secretary of the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., March 24, 1919, for constructing swimming pools at the Cardozo Playground, at First and H Streets, Southwest, and at Reservation 126, located at Virginia Avenue and 10th Street, Southeast. Blank forms of proposals, plans, specifications and all necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. A deposit of five dollars will be required from bidders to insure the return of the plans and specifications. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, COMMISSIONERS, D. C.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 10, 1919.—Sealed proposals will be received at this office until 3 P.M., March 26, 1919, and then opened for miscellaneous alterations in work room and basement of the United States Post Office in Meridian, Miss., in accordance with drawing RHP-701, and the specification, copies of which may be had at the office of the Custodian or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., Mar. 31, 1919, and then opened, for dredging Tuckerton Creek, N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: April 9.

Road Improvement

Bergen County, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of Bergen County for the improvement of Williams Avenue, Section No. 2, in the Boroughs of Hasbrouck Heights, Peterboro and Little Ferry in the County of Bergen with a 7½" to 10½" Portland Cement Concrete surface upon a cinder foundation; estimated amount of surface pavement required is 18,647 square yards, of foundation 10,640 cubic yards; and opened and read in public at Court House, Bergen County, New Jersey, on April 9th, 1919, at 2.30 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Road Committee, Bergen County Board of Chosen Freeholders, and must be accompanied by a certified check for not less than 10% of said bid, drawn to the order of the County Collector of Bergen County, N. J., and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of Bergen County Board of Chosen Freeholders.

JAS. M. HARKNESS,
Clerk.

Bids: April 2.

Street Paving

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, for the construction of a permanent pavement of approximately 30,000 sq.yd. until 3 o'clock P.M., April 2, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

Plans and specifications of the proposed work may be had at the office of the City Engineer, between the hours of 9 A.M. and 5 P.M., from March 16, 1919 to April 2, 1919. Said specifications provide for the grading, drawing, curbing and paving with some suitable pavement on a six inch concrete base, Main Street from Fuller Street to Alston Ave. and also the submission of bids on 50,000 sq.yd. to 100,000 sq.yd. to be defined later.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its own judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor,
GEO. W. WOODWARD, City Clerk,
J. L. MOOREHEAD, City Attorney,
H. W. KUEFFNER, City Engineer.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals will be received here until 2 p.m., April 3, 1919, and then opened, for annual maintenance dredging in Connecticut River, below Hartford. Further information on application.

OFFICIAL PROPOSALS

Bids: March 26.

Road Work

Marion County, W. Va.

Sealed proposals will be received until 12 o'clock noon March 26th, 1919, by the County Court of Marion County, for the construction of 8.73 miles of brick and concrete roads in Paw Paw, Lincoln and Mannington Districts.

Specifications and instructions to bidders are on file in the County Clerk's Office, and at the office of W. M. Linn, Road Engineer, Fairmont, W. Va.

A certified check in the sum of $500.00 must accompany each bid. The County Court reserves the right to reject any or all bids.

A. G. MARTIN,
Clerk of the County Court of
Marion County, W. Va.

Bids: March 27.

Concrete Bridge

OFFICE OF BOARD OF PUBLIC WORKS
City of Janesville, Wis.

Sealed proposals will be received at this office until March 27th, 1919, for the construction of a reinforced Concrete Bridge over Rock River on Jackson Street consisting of six 54 foot spans 55 feet wide in accordance with plans and specifications, plans and details on file in this office. A certified check for 5% of bid required. Copies of official notice, specifications and form of contract and bond furnished on application.

C. L. VALENTINE, Chairman.
C. V. KERCH, City Engr.
Feb. 24, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., March 26, 1919, for constructing about 47,000 cubic yards of earthwork in the East Cape Girardeau and Clear Creek Drainage District, Ill. Further information on application.

PROPOSALS FOR SOUTH WING SOUTH CADET Barracks and Guard House. Office Qaurtermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., March 27, 1919, and then opened, for construction of South Wing South Cadet Barracks and Guard House. Information on application.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

PROPOSALS FOR COAL. Office of the District Engineer, Mississippi River Dredging District, U. S. Dredge Depot, opposite Memphis, Tenn.—Sealed proposals will be received here until 12 M., March 31, 1919, and then opened, for furnishing 14,000 tons coal in barges. Further information on application to the District Engineer Lock Box 1017, Memphis, Tenn.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: March 26.

Paving

Baltimore, Md.

Separate sealed proposals, executed in duplicate, addressed to the Board of Awards, care of City Register, will be received by him in his office, in the City Hall, until 12 M., Wednesday, March 26, to grade, curb, and pave with Sheet Asphalt, Vitrified Block, Wood Block, and Granite Block Redressed, all on concrete base, the streets listed in the following contracts:

CONTRACT NO. 158

	From	To
Franklin St.	Howard St.	Charles St.
St. Paul St. Improvement	Lexington St.	Hamilton St.

Sheet asphalt	13,590 sq.yd.
Vitrified block	800 sq.yd.
Granite block redressed	480 sq.yd.
Certified check	$800

CONTRACT NO. 159

	From	To
Pratt St.	Carey St.	Parkin St.
Fayette St.	Smallwood St.	Gilmor St.
McHenry St.	Bentalou St.	Carey St.
Cole St.	Wilkens Ave.	Stricker St.
Eagle St.	Bentalou St.	Fulton Ave.
Bentalou St.	Eagle St.	Wilkens Ave.

Sheet asphalt	47,950 sq.yd.
Vitrified block	3,550 sq.yd.
Granite block redressed	180 sq.yd.
Certified check	$3,000

CONTRACT NO. 160

	From	To
Fairmount Ave.	Brodway	Kenwood Ave.
Lexington St.	Calvert St.	Guilford Ave.
St. Matthews St.	Aisquith St.	Lexington St.

Sheet asphalt	19,485 sq.yd.
Vitrified block	1,865 sq.yd.
Granite block redressed	2,405 sq.yd.
Certified check	$1,600

The figures above represent the approximate quantities of the principal items appearing in the contracts.

Specifications and proposal sheets and all other information can be obtained at the office of the Paving Commission, 214 E. Lexington St. A deposit of $5 will be required for specifications covering each contract. This will not be refunded unless a bid is filed.

The Board of Awards reserves the right to reject any and all bids. A certified check of the bidder on a clearing-house bank, drawn to the order of the Mayor and City Council of Baltimore to the amount as recited above, must accompany each bid.

The successful bidder will be required to furnish bond and to comply with the City Charter respecting contracts.

By order of the Paving Commission.

S. C. ROWLAND,
Chairman.

J. MYERS HEDIAN,
Secretary.

Approved: J. BARRY MAHOOL,
Acting Pres. Board of Awards.

O. K.: FRANK DRISCOLL,
Asst. City Solicitor.

Bids: March 27.

Road Construction

Danville, Ill.

1. Notice is hereby given that sealed proposals for the construction of roads in Vermilion County will be received at the office of the County Clerk, Court House, City of Danville, Illinois, until 2 o'clock P.M., March 27, 1919, at which time and place during the meeting of the Board of Supervisors, the proposals will be publicly opened and read.

2. The proposed work comprises the construction of concrete and brick roads ten (10) feet wide with three (3) feet of macadam or gravel shoulders together with all grading, shaping earth shoulders, reinforced concrete work, ditching, drainage and other incidental work as shown in detail on plans and specifications, on file in the office of the County Clerk, and Superintending Engineer.

3. Proposals shall be made on forms furnished by the County of Vermilion.

3a. Proposal blanks and also the forms of contract and bonds that the successful bidders will be required to execute are now on file in the offices of said County Clerk and said Superintending Engineer.

4. The Board of Supervisors reserves the right to reject any and all proposals, and to waive technicalities in any proposal.

4a. The Board of Supervisors reserves the right to withdraw from said opening of bids, at any time on or before March 25, 1919, any Subdivision or Subdivisions of said unfinished work, in case the bondsmen who are responsible to said County for the completion of such Subdivision or Subdivisions shall have taken over and undertaken the completion of such Subdivision or Subdivisions, and shall have made arrangements, satisfactory to this Board, to complete said work not later than said November 15, 1919; and that said Board reserves the right to reject bids on any part or parts of said work, if such bids seem to this Board to be too high, and to do any part or parts of said work under its own management and direction.

5. Bidders may furnish proposals on one or more of the fourteen Subdivisions of approximately four miles each, into which the work is divided.

6. All proposals must be accompanied by a certified check in the sum of two (2) per cent of the total bid and made payable to the order of Robert H. Mater, County Treasurer of said County; said check to be returned unless in case of the acceptance of his proposal, the bidder should fail to execute a contract and file a bond in a sum equal to the amount of the bid within ten (10) days of the date of the acceptance of this proposal, in which case the check is to become the property of Vermilion County, and is to be considered as payment of damages due to delay and other causes suffered by the county from neglect of the bidder to execute a contract.

7. Proposals must be addressed or delivered to said County Clerk, Court House, Danville, Illinois; marked plainly on the outside, "Proposal for the Construction of Vermilion County Bond Roads Subdivision, Number————."

Dated this 12th day of March, A.D. 1919.

JOHN R. MOORE,
County Clerk of the County
of Vermilion in the State of Illinois.

Bids: April 1.

Grading Trafficway

Kansas City, Mo.

Bids for grading Chestnut Avenue trafficway in Kansas City, Mo., will be received by the Board of Park Commissioners up to 2 P.M., Tuesday, April 1, 1919, for the construction of Chestnut Avenue trafficway through North Terrace Park, the approximate amount of excavation, 65,500 cu.yd.; rubble masonry, 250 cu.yd.; drain pipe, 12 in. and 24 in., 1500 lin.ft.; catch basins and manholes, 19; cut-stone coping, 440 lin.ft.; cut-stone caps 3. Certified check or cash deposit in the sum of $1500 must accompany bid. Contracts will be awarded to the lowest and best bidders, but the right is reserved to reject any or all proposals.

PROPOSALS FOR REMOVING WRECK—U. S. Engineer Office, 540 Federal Building, Buffalo, N. Y.—Sealed proposals for removing wreck of Steamer Tempest from Erie Harbor, Pa., will be received here until 11 A.M., April 10, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: April 3.

Road Work

Flemington, N. J.

The Board of Chosen Freeholders of Hunterdon County will receive bids at their rooms, Flemington, N. J., on April 3d, 1919, up to the hour of 11 o'clock A.M., for resurfacing a portion of the Ringoes-Woodsville Road in said County.

Length	2.457	miles
Broken stone	2250	tons
Filler	700	tons
Dustless screenings	400	tons
Tarvia B	15135	gallons

Specifications may be obtained from Grant Davis, County Engineer, Whitehouse Station, N. J., and will be on file at the office of H. L. Stout, County Solicitor, Flemington, N. J.

By order of the Board of Chosen Freeholders.

DAVID L. HOLCOMBE,
Director.
EDWARD H. WILSON,
WM. B. WEAN.

Bids: April 18.

Constructing 48-Inch Force Main

CITY OF AKRON, OHIO
DEPARTMENT OF PUBLIC SERVICE
WATER WORKS IMPROVEMENT
CONTRACT NO. 121

Sealed proposals for constructing a forty-eight inch pipe line and appurtenances will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, central standard time of Friday, the eighteenth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing and laying of approximately 2.3 miles of 48-in. pipe line, 0.1 mile of 36-in. pipe line, together with all appurtenances, between the Village of Kent and the Distributing Reservoir in Akron.

Bids will be received as follows:

Bid A.—For furnishing approximately 4400 tons of 48-in. cast iron pipe, 170 tons of 36-in. cast iron pipe and 230 tons of special castings.

Bid B.—For laying 2.3 miles of 48-in. cast iron pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

Bid C.—For furnishing and laying 2.3 miles of 48-in. steel pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

All proposals must be made on the forms furnished by the city.

Each bidder must accompany his proposal with a satisfactory bond or certified check in the sum of ten thousand ($10,000) dollars.

A surety bond in the amount of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Plans and specifications may be seen at the office of the Director or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio, upon deposit of ten ($10) dollars, which sum will be refunded on return of the plans and specifications in good condition within ten days after the award of the contract.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works
G. G. DIXON, Engineer.

Bids: April 9.

Road Work

CITY OF PROVIDENCE WATER SUPPLY BOARD

Providence, R. I.

Sealed proposals for building two sections of Earth Road, one (Contract 4) about 1.8 miles in length in the Town of Scituate, R. I., and one (Contract 7) about 3.4 miles in length in the Town of Foster, R. I., as parts of the Road Relocation in connection with the proposed Scituate Reservoir, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M. on Wednesday, April 9, 1919, at which time and place they will be publicly opened and read.

The quantities, in cubic yards, of the main items of work are as follows:

	Contract No. 4	Contract No. 7
Earth excavation	12,000	20,000
Rock excavation	2,000	2,000
Borrow	5,000	10,000
Concrete masonry	250	190

Contracts 4 and 7 are located, respectively, about 9 miles and 16 miles westerly from the City of Providence.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.
B. THOMAS POTTER, Chairman,
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

PRELIMINARY NOTICE

Plans and specifications for the construction of other earth roads in connection with the proposed Scituate Reservoir, and for the construction during 1919 of portions of the main dam of the Scituate Reservoir are in preparation, and contracts for this work will probably be advertised during April.

Plans and specifications for the main dam and dike of the Scituate Reservoir are also in preparation and this work will, it is expected, be advertised during the late summer or early fall, if conditions then warrant. The main dam and dike will be built mainly of earth and will involve the handling of about 2,500,000 cu.yd.; the work will include gate chambers, masonry spillway, spillway channel, a reinforced concrete bridge, and other appurtenant structures.

Preliminary information may be obtained by interested contractors at the office of the Chief Engineer, 661 Westminster St., Providence, R. I.

Bids: April 1.

Concrete Bridge Construction

Kansas City, Mo.

Bids will be received by the Board of Park Commissioners, Kansas City, Mo., until 2 P.M., Tuesday, April 1, 1919, for the construction of reinforced concrete bridge carrying Cliff Drive over Chestnut Avenue Trafficway in Kansas City, Mo. Approximate quantities reinforcing metal, 100,000 lb.; concrete in abutments, 1850 cu.yd.; concrete in arch, 846 cu.yd.; concrete in stairway, 30 cu.yd.; handrail, 433 lin.ft.; surface finish, 3700 sq.ft.; stone veneer, 258 sq.yd. Deposit of $750 required with each bid.

Contracts will be awarded to the lowest and best bidders, but the right is reserved to reject any and all proposals.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Old Federal Building, Wilmington, Del.—Sealed proposals will be received here until 11 A.M., March 24, 1919, and then opened, for dredging Smyrna River, Del. Further information on application.

Bids: April 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 6, Mullica Hill—Mantua Section, concrete surface estimated 54,386 sq.yds., Gloucester County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 9, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department, at Trenton, N. J., and in the offices of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 22.

Westerly Sewage Treatment Works

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, until 12 o'clock noon (Eastern Standard time), April 22, 1919, for the construction of the Sewage Treatment Works at the westerly site.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, outfall conduits, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Wooden Piling	15,000	lin.ft.
Excavation	30,000	cu.yds.
Concrete	15,000	cu.yds.
Steel Reinforcement	850	tons
C. I. Piping	60	tons
Buildings	125,000	cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Commissioner of Engineering, Room No. 618, City Hall, after March 31, 1919. A deposit of Fifteen Dollars ($15.00) will be required for each set of plans and Three Dollars $3.00) for each set of specifications taken from the above office. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above office, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Cleveland.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety copmany authorized to do business in the State of Ohio or by a certified check on a solvent bank for Ten Thousand Dollars ($10,000.00) made payable to the City of Cleveland, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Commissioner of Engineering and delivered at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, previous to 12 o'clock noon (Eastern Standard Time) on the day specified.

The City reserves the right to reject any or all bids.

ED. SHATTUCK,
Commissioner of Purchases and Supplies.

Bids: March 31.

Highway Work

Maryland.

SEALED PROPOSALS for building one section of State Highway, as follows:

Contract No. A-13, Allegany County.—One section of State Highway from Green Ridge to the West side of Polish Mountains, for a distance of 1.4 miles, oilbound macadam will be received by the State Roads Commission, at its offices, 601 Garrett Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 31st day of March, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 17th day of March, 1919.

FRANK H. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 9.

Paving

Ithaca, N. Y.

Bids will be received until April 9, 1919, for paving various streets:

5,600	sq.yd. brick pavement with concrete foundation.
20,000	sq.yd. brick pavement over old macadam.
5,600	sq.yd. bitulithic surface on bituminous concrete foundation.
5,600	sq.yd. bitulithic surface on cement concrete foundation.
20,000	sq.yd. bitulithic surface on old macadam.
10,200	lin.ft. cement concrete curb.

HENRY L. STEWART,
City Engineer.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvement

Camden, N. J.

Notice is hereby given that sealed bids will be received by Chas. F. Wise, Chairman of Road Committee for the widening and resurfacing of a portion of the Camden, Ellisburg and Marlton Turnpike Road, in the County of Camden, with a bituminous surface upon an old Telford and new Telford foundation; estimated amount of surface pavement required is 5640.19 tons of bituminous concrete, of foundation 9471.9 tons of new stone; and opened and read in public at public meeting in the Court House in Camden, N. J., on Monday, April 7, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by J. J. Albertson, Camden County Engineer, and approved by the State Highway Department, have been filed in the office of the said engineer at the Court House in Camden, and of said State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Chas. F. Wise, Chairman, Road Committee, Court House, Camden, N. J., and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Board of Chosen Freeholders of the County of Camden, N. J.

FRED W. GEORGE, Clerk.

March 17, 1919.

Bids: April 1.

Sanitary Sewer

Town of Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on Centre St. from Washington Ave. to Franklin Ave., will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., April 1, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are: 8572 ft. of trench of various depths; 3200 ft. of 6 in. vitrified pipe; 5000 ft. of 6 in. vitrified pipe; 22 manholes. The time of completion is limited to ninety calendar days.

Pamphlets containing information for bidders, form of proposal, agreement and specifications, also set of blue prints, can be obtained from the Town Engineer or Town Clerk on payment of $5, which will be refunded on the return of the pamphlet and drawings in good order.

A certified check for $1000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

SIMON BLUM, Town Clerk.

Bids: March 25.

Air Compressor

Marion, Indiana.

Bids for an Air Compressor, according to plans and specifications on file, will be received at Marion, Indiana, on Tuesday, March 25, 1919, at 10 o'clock A.M., by the Board of Public Works.

Further information will be furnished upon request.

T. E. PETRIE, President.
BOARD OF PUBLIC WORKS.

OFFICIAL PROPOSALS

Bids: April 8.

Railroad Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11th FLOOR, MERSHON BUILDING—
1211 CHESTNUT STREET

Philadelphia, March 18, 1919.

Sealed proposals addressed to the undersigned, as above, will be received until 12 o'clock Noon on Tuesday, April 8, 1919, for constructing the first four sections of the Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, a distance of about six miles. Contract No. 701, authorized by Ordinance of Councils approved July 20, 1916.

The contract will include the grading, and the furnishing and laying of the track, and the construction of a 504 ft. steel viaduct. There will be about 15,900 lin.ft. of individual track of girder rail type with granite block paving and about 32,200 lin.ft. of individual track of "T" rail type with ballast.

Plans and specifications can be seen at the office of the Department on the 12th floor of the Mershon Building, and copies of same with blank forms of proposals will be supplied to intending bidders upon deposit of $10 which will be refunded upon the return of the plans.

Bidders must be skilled and regularly engaged in this class of work.

The Contractor will be required to comply with the Act of Assembly of July 18, 1917, relative to Workmen's Compensation insurance and must furnish proof of the acceptance of the said act and proof of insurance of liability thereunder, or a certificate of exemption therefrom.

No bid will be considered unless accompanied by a certificate from the city Solicitor that a proposal bond in the sum of Five Hundred Dollars ($500) has been filed in accordance with the provisions of an Ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interests of the City of Philadelphia.

WM. S. TWINING, Director.

Bids: April 2.

Road Work

Paragould, Arkansas.

Notice is hereby given that the Board of Commissioners of Road Improvement, District No. 4, of Poinsett County, Arkansas, at the office of W. R. Heagler & Sons, in the city of Harrisburg, Arkansas, will until 2 P. M. on Wednesday, April 2, receive proposals for the performance of the following work:

Clearing, 43.4 acres; grubbing, 39 acres; furnishing and placing 797 lin.ft. 12-in. vitrified clay pipe, 491 lin.ft. 18-in. vitrified clay pipe; reinforced concrete abutments, 7 cu.yd.; reinforced concrete culverts, 75 cu.yd.; plain concrete end walls for pipe, 71.5 cu.yd.; 742 lin.ft. wood and pile bridges; 6840 ft. B.M. reflooring old steel bridges; moving one 25-ft. steel span about twenty-five feet to line; 97,000 cu.yd. excavation for roadway and ditches; furnish gravel and clay binder, haul and roll and finish hard surface on 16.38 miles road. The preceding quantities are approximate only.

All proposals must be made on blanks furnished by the engineers or may be had on application to the secretary of the Board of Commissioners, and must be accompanied by either a certified check or a proper and good proposal bond in the amount of one thousand dollars.

All proposals will be opened in public promptly at 2 P.M. on Wednesday, April 2, 1919, at the office of the Board of Commissioners.

OFFICIAL PROPOSALS

The Board of Commissioners reserve the right to accept any or to reject any or all of the bids or proposals offered.

Plans, specifications and estimates may be had from the engineers, W. R. Heagler & Sons, Paragould, Arkansas, upon deposit of ten dollars, or may be seen at the office of the County Court of Poinsett County, in the City of Harrisburg, Arkansas.

L. B. STONE, President,
L. N. LANDERS, Secretary.
W. R. HEAGLER & SONS, Engineers,
Paragould, Arkansas.
March 10, 1919.

Bids: March 31.

Water-Works Improvement

Philadelphia, Pa., March 18, 1919.

Notice is hereby given that sealed proposals will be received by the Bakerton Water Company, at their office in Bakerton (Elmora P. O.), Cambria County, Penn., until 12 o'clock noon, on Monday, March 31st, 1919, for the construction complete of a

(1) STORAGE WATER RESERVOIR

One and one-fourth miles east of Bakerton, Cambria County, Penn., with all its accessories, in which the Embankment Item is about Seventeen Thousand Cubic Yards, and the Concrete Masonry Item about Twelve Hundred Cubic Yards; and

(2) EIGHT INCH CAST IRON PIPE WATER LINE

From the Gate House of the Dam to Reed Street, in Bakerton, about 6600 lineal feet, with Specials, Gates, Hydrants, etc.

Proposals will be required to conform to Plans and Specifications on file at the Office of the Bakerton Water Company, 421 Chestnut St., Philadelphia; at the Office of the Sterling Coal Company, in Bakerton (Elmora P. O.), Cambria County, Penn.; or at the Office of E. W. Hess, Engineer in Clearfield, Penn., and must be made on the Bidding Sheet that will be furnished to bidders on request.

Each bidder must deposit with each of his bids, Cash or a certified check, made payable to the "aBkerton Water Company" in the amount of Five Hundred Dollars ($500.00) a sa guarantee of good faith that he will, if a contract is awarded to him, within ten (10) days thereafter, execute a written contract for the performance of the same. The deposits of other bidders will be returned them.

A Bond satisfactory to the Bakerton Water Company, in an amount equal to the amount of the bid, for the faithful performance of the contract, will be required of the bidder to whom either contract is awarded.

Bids must be sealed, and addressed to the "Bakerton Water Company" and marked plainly on the outside of the envelope enclosing them, "Proposal for Water Works Improvements."

The right is reserved to accept any or reject any or all of the bids.

BAKERTON WATER COMPANY.
JOHN M. BRADLEY, Pres.

Bids: April 1.

Concrete Bridge

Fort Dodge, Iowa.

Sealed bids will be received until 9:30 A.M., April 1, 1919, at the office of the City Clerk, for the construction of a reinforced concrete bridge across Des Moines River, in the City of Fort Dodge, Iowa. Estimated quantities, 2100 cu.yd. concrete, 60 tons reinforcing steel. Plans and specifications may be received from the City Engineer upon a deposit of $25, which will be refunded upon return of plans within 30 days in good condition. Certified check, 10 per cent.

C. H. REYNOLDS, City Engineer

OFFICIAL PROPOSALS

Bids: April 7.

Highway Work

Denver, Colo.

Bids will be received by the State Highway Commission of Colorado, at its offices in the Museum Building, Denver, Colorado, until 2 o'clock P.M., the 7th day of April, 1919, and will then be opened for the construction of State Highway No. 26, between Apache Creek via Walsenburg and Trinidad to Raton Pass.

Bids must be in a sealed envelope and labeled, "Proposal for the construction of State Highway No. 26, known as the 'Pueblo, Walsenburg, Trinidad Road'."

The State Highway Commission will not be responsible for the premature opening of bids not properly labeled.

A certified check for the sum of one thousand and five hundred ($1500) dollars, payable to the State Treasurer of Colorado, must be deposited with all bids for each section bid upon and receipt taken therefor, from the Secretary of the State Highway Commission.

Bids will be for the following classes of work:

Excavation other than rock.
Rock excavation.
Screened or crushed shale]
Screened or crushed gravel } Surfacing
Crushed rock]
Rubble wall.
Corrugated metal culverts.
Steel bridges.
Concrete, bridges and culverts.
Reinforcing steel.
Railing.

The work will be divided into four sections as shown on the proposal sheet. Bidders may bid upon one or more sections.

Each proposal must be for all the items for the section, and each proposal will be considered on the basis of the total of all the items for each section.

Bids must be upon the plans and specifications on file. Alternate plans or specifications will not be considered.

Plans and specifications will be on file in the office of the State Highway Commission, Museum Building, Denver, Colorado, and the office of the County Clerk at Trinidad and the County Clerk at Walsenburg, Colorado.

T. J. EHRHART,
State Highway Commissioner.

Attest:
N. A. BALLOU,
Secretary.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: April 3.

Road Improvements

Jonesboro, Ark.

Sealed bids for the improvement of certain roads and streets in Road Improvement District No. 4, Craighead County, Arkansas, will be received by the Board of Commissioners of the Jonesboro-Nettleton Road Improvement District at the office of the Secretary, V. C. Kays, Jonesboro, Arkansas, until 2 P.M., April 3, 1919, at which time and place they will be publicly opened and read.

The work proposed consists of the grading and paving with asphaltic concrete pavement of approximately nine miles of roads, together with the construction of the necessary culverts.

The principal quantities are approximately as follows:

Grading, average haul not exceeding 500 ft.	27,800	cu.yd.
Paving, asphaltic concrete	78,100	sq.yd.
Vitrified pipe culverts, 18 in. diameter	335	lin.ft.
Vitrified pipe culverts, 24 in. diameter	235	lin.ft.
Concrete in culverts and head walls	583	cu.yd.

Plans and specifications may be examined at the office of the Secretary of the District, Jonesboro, Arkansas, or at the Jonesboro office of the Engineers, Klyce & Kackley, or a copy may be obtained from the Engineers upon receipt of a deposit of $15, of which amount ten dollars ($10) will be refunded when the plans and specifications are returned in good order. If additional information is required, address the Engineers.

The right is reserved to reject any or all proposals and to waive informalities. The contractor will be paid cash on monthly estimates amounting to 80 per cent of the work done.

All proposals or bids must be accompanied by a certified check drawn on a responsible bank or trust company and made payable to J. E. Parr, Treasurer, for a sum not less than $10,000. The successful bidder will be required to furnish a performance bond in the sum of 50 per cent of the contract price.

V. C. KAYS, Secretary,
Board of Commissioners.

KLYCE & KACKLEY,
Civil and Consulting Engineers,
721 Fourth and First National Bank
Building, Nashville, Tenn.
March, 1919.

Bids: April 2.

Road Construction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction of a section of state highway upon the Putnam Pike, so-called, in the towns of Smithfield and Glocester and approximately 2.4 miles in length will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Wednesday, April 2, 1919, at which time they will be opened and read in public:

The principal quantities involved are as follows:

Earth excavation	9250	cu.yd.
Borrow	3500	cu.yd.
Ledge	500	cu.yd.
Stone fill	3450	cu.yd.
Gravel foundations	3350	cu.yd.
Concrete masonry	160	cu.yd.
Rip-rap	1500	sq.yd.
Cobble gutter	1100	sq.yd.
Wooden guard rail	2750	lin.ft.
Crushed stone	6000	tons
Bituminous concrete surface (Topeka type)	26000	sq.yd.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, March 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
MICHAEL VAN BEUREN,
J. HENRY WOODWARD.

Bridge Letting

Greenbrier County, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer.

POSITIONS VACANT

CONTRACTOR'S superintendent wanted—with several years' experience on all classes of building work. State experience in full, giving names past employers and capacity in which employed. State age, married or single, salary desired. P-985, Eng. News-Record, Chicago.

FIRST class structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution. State experience in full giving names of past employers and character of work with each. Experience must have included detailing structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location middle west. P-864, Eng. News-Record, Chicago.

Were YOU Ever Turned Down?
Many a contractor has been turned down on his
BOND
because his case was not properly presented.
Swart "Engineering Insurance Service" gives your application a far better chance.
NO EXTRA CHARGE
Phone, Wire, Write.
HARMON V. SWART
19 Liberty Street, New York

POSITIONS VACANT

DETAILER wanted—familiar with making shop drawings for structural steel and reinforcing concrete. State in detail experience, age, married or single, salary and date available. Mosher Mfg. Company, Dallas, Texas.

MAN WANTED with wide experience and executive ability, for general manager of Building Supplies Corp. Apply with reference and recommendations to P-982, Eng. News-Record, Philadelphia.

FOUR crews for Marion Steam Shovel wanted; out of town; long railroad job. Rates: Runner, $225; Craneman, $175, for 30 day month, straight time ten hours. P-983, Eng. News-Record.

OPERATING and mechanical engineer wanted, with technical education and practical experience, to take charge of our power plant—B. & W. boilers, Corliss compound and turbo engines, surface, condenser, pumps, etc.; $200 per month. Give age, references, and when could report. Good schools and surroundings. Burton-Swartz Cypress Company of Florida, Perry, Fla.

TRUCK body or trailer designer wanted; Watson, Canastota, N. Y.

WANTED first-class highway engineer on sand-clay and gravel-clay roads in Florida. Must be young and active, come well recommended, and furnish transit and a light car. Party will be required to pay present incumbent of the place $350 for placing him and taking the time to initiate the applicant into the job. Salary, $300 per month. Address P-958, Eng. News-Record, Philadelphia.

ENGINEER WANTED

A large firm contemplating extensive Harbor and Dock works abroad desires to secure the services of a capable construction engineer. One who can prepare the general layout and estimates of cost, and, should occasion require, direct its operations. Knowledge of French and Spanish desirable.

Address "HARBOR,"
Room 2502, 110 West 40th St.,
New York City.

WANTED

Reinforced Concrete Engineer

familiar with estimating and designing concrete buildings and capable as salesman, preferably one having had experience with the reinforcing bar companies.

CONCRETE ENGINEERING CO.
140 S. Dearborn St., Chicago.

STRUCTURAL STEEL DETAILING for

Mill buildings, office buildings, towers, tipples, viaducts, schools, theatres, etc.

Correctness and time of delivery of drawings guaranteed. All drawings made in accordance with your Shop Standards. We have a complete organization, which will save you money, time and worry: can refer you to twenty or more satisfied clients, covering nine years' business. The Mail makes Five Hundred Miles the same as next door.

Send us your Inquiries.
Write or wire and we will come and talk it over.

Designs for Structural Steel and Reinforced Concrete Industrial Buildings. Foundations, etc.

RAPP & DUNKEL
Fulton Bldg., Pittsburgh, Pa.

An Opportunity—
for

Sales Managers, Department Managers, District Managers, and Salesmen, who have been more than successful in the building material line.

We want to receive confidential applications from men who have their eyes open, who know that some men have made their biggest strides by going from one industry to another.

The positions in question are newly created and applications should be made to cover any one but only one of the above positions.

Age: About 30 to 40 years with a degree of maturity greater, if possible, than is usually found at that age.

Experience: A record of successful accomplishments in any Branch of the building material business. Practical experience in dealing with sales problems, organization and management and sound methods of procedure are essential.

Personal Qualifications:

1. Superior executive ability which will enable you to deal effectively with new situations and problems as they arise.
2. Poise and judicial quality which will inspire confidence in your mental processes.
3. Initiative and resourcefulness which will assist you in obtaining results without close supervision of others.
4. Tact, cooperative spirit, and adaptability which will insure your making good with our business friends and your office associates and obtaining their support.

To the right men these positions offer genuine opportunity for growth. You will be cordially received into an official family of young men who know the value of team work and who are practicing it.

We especially solicit applications from men who have done big things elsewhere and who will enjoy surroundings inviting their highest ability.

To insure consideration applications should set forth full particulars concerning age, nationality, business experience, especially what line of building material have you sold or managed successfully, past and present connections. Please state these as concisely as possible, if possible forward a recent photograph (this will be returned to you.)

Do not answer this unless you are thoroughly convinced of your eligibility and can demonstrate in your letter that it would be advantageous to engage you.

All replies will naturally be held in the strictest confidence, and must be by letter only.

Address Vice President,

GAGEN SALES CORPORATION
Majestic Building, Chicago, Ill.

Bids: April 7.

Highway Work

Denver, Colo.

Bids will be received by the State Highway Commission of Colorado, at its offices in the Museum Building, Denver, Colorado, until 2 o'clock P.M., the 7th day of April, 1919, and will then be opened for the construction of State Highway No. 26, between Apache Creek via Walsenburg and Trinidad to Raton Pass.

Bids must be in a sealed envelope and labeled, "Proposal for the construction of State Highway No. 26, known as the 'Pueblo, Walsenburg, Trinidad Road'."

The State Highway Commission will not be responsible for the premature opening of bids not properly labeled.

A certified check for the sum of one thousand and five hundred ($1500) dollars, payable to the State Treasurer of Colorado, must be deposited with all bids for each section bid upon and receipt taken therefor, from the Secretary of the State Highway Commission.

Bids will be for the following **classes** of work:

Excavation other than rock.
Rock excavation.
Screened or crushed shale ⎫
Screened or crushed gravel ⎬ **Surfacing**
Crushed rock ⎭
Rubble wall.
Corrugated metal culverts.
Steel bridges.
Concrete, bridges and culverts.
Reinforcing steel.
Railing.

The work will be divided into four sections as shown on the proposal sheet. Bidders may bid upon one or more sections.

Each proposal must be for all the items for the section, and each proposal will be considered on the basis of the total of all the items for each section.

Bids must be upon the plans and specifications on file. Alternate plans or specifications will not be considered.

Plans and specifications will be on file in the office of the State Highway Commission, Museum Building, Denver, Colorado, and the office of the County Clerk at Trinidad and the County Clerk at Walsenburg, Colorado.

T. J. EHRHART,
State Highway Commissioner.

Attest:
N. A. BALLOU,
Secretary.

Bids: April 4.

Excavating Ditch

Sterling, Ill.

Dr. Comrs. Dr. Dist. No. 1 Hahnaman Tp., Whiteside Co., Ill., will receive bids at office of Carl E. Sheldon, Sterling, Ill., up to 3 P.M., April 4, 1919, for deepening, widening, etc., ditch of district requiring excavation of 101,211 cu.yds. Length of ditch 37,765 feet. Specifications office of Carl E. Sheldon.

PROPOSALS FOR REMOVING WRECK—U. S. Engineer Office, 540 Federal Building, Buffalo, N. Y.—Sealed proposals for removing wreck of Steamer Tempest from Erie Harbor, Pa., will be received here until 11 A.M., April 10, 1919, and then opened. Information on application.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals will be received here until 2 p.m., April 8, 1919, and then opened, for annual maintenance dredging in Connecticut River, below Hartford. Further information on application.

Bids: April 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 6, Mullica Hill—Mantua Section, concrete surface estimated 54,386 sq.yds., Gloucester County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 9, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department, at Trenton, N. J., and in the offices of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 3.

Road Work

Flemington, N. J.

The Board of Chosen Freeholders of Hunterdon County will receive bids at their rooms, Flemington, N. J., on April 3d, 1919, up to the hour of 11 o'clock A.M., for resurfacing a portion of the Ringoes-Woodsville Road in said County.

Length	2.457 miles
Broken stone	2250 tons
Filler	700 tons
Dustless screenings	400 tons
Tarvia B	15135 gallons

Specifications may be obtained from Grant Davis, County Engineer, Whitehouse Station, N. J., and will be on file at the office of H. L. Stout, County Solicitor, Flemington, N. J.

By order of the Board of Chosen Freeholders.

DAVID L. HOLCOMBE,
Director.
EDWARD H. WILSON,
WM. B. WEAN.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., March 29, 1919, and then opened for constructing Lock and Abutment for Dam No. 30, Ohio River, near Greenup, Ky. Further information on application.

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholder ' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 58.4 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

Greenville to head of Lake Washington	25.2 Miles
Head of Lake Washington to County line	8.9 Miles
Greenville to Metcalfe	4.4 Miles
Leland to Sunflower County line	10.2 Miles
Hollandale to Murphy Bayou	5.0 Miles
Arcola to Trail Lake	4.7 Miles

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD, Chairman.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

Bids: April 11.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., April 11, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 6915 lin.ft. of reinforced concrete, also 43,391 ft. of bituminous surface course on a concrete foundation in Allegheny County; 16,362 ft. of bituminous surface course on a concrete foundation in Bradford County; 8000 ft. of reinforced concrete in Franklin County; 15,020 ft. of reinforced concrete in Fulton County; 20,720 ft. of bituminous surface course on a concrete foundation in Jefferson County; 28,815 ft., also 8916 ft. of bituminous surface course on a concrete foundation in Lackawanna County; 20,366 ft. of bituminous surface course on a concrete foundation in Northumberland County; 29,546 ft. of bituminous surface course on a concrete foundation in Pike County; 9934 ft. of vitrified brick in McKean County, and 6675 ft. of reinforced concrete and Hillside vitrified brick, in Somerset County.

Bids will also be received for the resurfacing with bituminous mixtures on a prepared broken stone base of 39,824 ft. in Berks County, also 35,907 ft. and 38,282 ft. in Lebanon County.

Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg; 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. L. S. Sadler, State Highway Commissioner.

Bids: April 8.

Sanitary Sewers

OFFICIAL NOTICE NO. 5

Hagerstown, Maryland.
March 3, 1919.

Published by the authority of the Sewerage Commission of Hagerstown, Maryland, sealed proposals for building intercepting storm and sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured and other localities in the City of Hagerstown, will be received at the office of the Sewerage Commission in the Police Headquarters Building until 7:30, Tuesday, April 8, 1919, at which time and place during the session of the said Commissioners, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 2800 lin.ft. each of 18-in. sanitary and 66-in. storm water sewers with all manholes, inlets, foundations and appurtenances, both largely in tunnel.

On and after Thursday, March 13, 1919, specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission and full sets of plans will be sent to any contractor on the receipt of $10, the sum to be returned upon the surrender of the plans in good condition within 30 days from the date of award.

The Sewerage Commission reserves the right to reject any and all bids.

(Signed) E. LEROY HEARD,
Secretary.
(Countersigned) WILLIAM WINGERT,
Chairman.

Bids: April 25.

Constructing 48-Inch Force Main

CONTRACT NO. 121
DEPARTMENT OF PUBLIC SERVICE
WATER WORKS IMPROVEMENT
CITY OF AKRON, OHIO

Sealed proposals for constructing a forty-eight inch pipe line and appurtenances will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, central standard time of Friday, the twenty-fifth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing and laying of approximately 2.3 miles of 48-in. pipe line, 0.1 mile of 36-in. pipe line, together with all appurtenances, between the Village of Kent and the Distributing Reservoir in Akron.

Bids will be received as follows:

Bid A.—For furnishing approximately 4400 tons of 48-in. cast iron pipe, 170 tons of 36-in. cast iron pipe and 230 tons of special castings.

Bid B.—For laying 2.3 miles of 48-in. cast iron pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

Bid C.—For furnishing and laying 2.3 miles of 48-in. steel pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

All proposals must be made on the forms furnished by the city.

Each bidder must accompany his proposal with a satisfactory bond or certified check in the sum of ten thousand ($10,000) dollars.

A surety bond in the amount of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Plans and specifications may be seen at the office of the Director or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio, upon deposit of ten ($10) dollars, which sum will be refunded on return of the plans and specifications in good condition within ten days after the award of the contract.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works.
G. G. DIXON, Engineer.

Bids: April 8.

Bridge Letting

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer.

Bids: April 8.

Railroad Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11th FLOOR, MERSHON BUILDING—
1211 CHESTNUT STREET
Philadelphia, March 18, 1919.

Sealed proposals addressed to the undersigned, as above, will be received until 12 o'clock Noon on Tuesday, April 8, 1919, for constructing the first four sections of the Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, a distance of about six miles. Contract No. 701, authorized by Ordinance of Councils approved July 20, 1916.

The contract will include the grading, and the furnishing and laying of the track, and the construction of a 504 ft. steel viaduct. There will be about 15,900 lin.ft. of individual track of girder rail type with granite block paving and about 32,200 lin.ft. of individual track of "T" rail type with ballast.

Plans and specifications can be seen at the office of the Department on the 12th floor of the Mershon Building, and copies of same with blank forms of proposals will be supplied to intending bidders upon deposit of $10 which will be refunded upon the return of the plans.

Bidders must be skilled and regularly engaged in this class of work.

The Contractor will be required to comply with the Act of Assembly of July 18, 1917, relative to Workmen's Compensation insurance and must furnish proof of the acceptance of the said act and proof of insurance of liability thereunder, or a certificate of exemption therefrom.

No bid will be considered unless accompanied by a certificate from the city Solicitor that a proposal bond in the sum of Five Hundred Dollars ($500) has been filed in accordance with the provisions of an Ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interests of the City of Philadelphia.

WM. S. TWINING, Director.

Bids: April 1.

Sanitary Sewer

Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on Centre St. from Washington Ave. to Franklin Ave., will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., April 1, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are: 8572 ft. of trench of various depths; 3200 ft. of 6 in. vitrified pipe; 5000 ft. of 6 in. vitrified pipe; 22 manholes. The time of completion is limited to ninety calendar days.

Pamphlets containing information for bidders, form of proposal, agreement and specifications, also set of blue prints, can be obtained from the Town Engineer or Town Clerk on payment of $5, which will be refunded on the return of the pamphlet and drawings in good order.

A certified check for $1000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

SIMON BLUM, Town Clerk

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 5, 1919, and then opened, for constructing Pass, Weir, Beartrap, etc., for each of Dams Nos. 23 and 25, Ohio River. Information on application.

Bids: April 2.

Road Construction

STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the reconstruction of a section of state highway upon the Putnam Pike, so-called, in the towns of Smithfield and Glocester and approximately 2.4 miles in length will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Wednesday, April 2, 1919, at which time they will be opened and read in public:

The principal quantities involved are as follows:

Earth excavation	9250	cu.yd.
Borrow	3500	cu.yd.
Ledge	500	cu.yd.
Stone fill	3450	cu.yd.
Gravel foundations	3350	cu.yd.
Concrete masonry	160	cu.yd.
Rip-rap	1500	sq.yd.
Cobble gutter	1100	sq.yd.
Wooden guard rail	2750	lin.ft.
Crushed stone	6000	tons
Bituminous concrete surface (Topeka type)	26000	sq.yd.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200, payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Friday, March 21, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD,
BENJAMIN F. ROBINSON,
FRANK COLE,
MICHAEL VAN BEUREN,
J. HENRY WOODWARD.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Cottage Street, Mendon Avenue and Benefit Street, will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1840 ft. of 60-in., 913 ft. of 50-in., 620 ft. of 44-in. brick, "lock joint" pipe, segment block or monolithic concrete sewers in excavation varying from 13 ft. to 25 ft. in depth, with all necessary bell-mouths, catch-basins and man-holes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL.
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals for furnishing, delivering and erecting Bear-Trap Leaves for Dam No. 39, Ohio River, will be received here until 2 p.m., April 4, 1919, and then opened. Information on application.

Bids: April 9.

Reservoir Completion

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office in the City Hall, until 2 o'clock P.M., on Wednesday, April 9, 1919, for the construction and completion of a 15 million gallon storage basin at Wabash and St. John Avenue, Kansas City, Mo. All proposals shall be based upon and shall be in accordance with the approximate estimate of quantities, and the plans and specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Contract for the excavation of the above basin has been let and work is now proceeding on same. The proposals requested in this advertisement are to cover all other work as shown in the plans and specifications to fully complete the basin.

Proposals shall be made upon the forms attached to specifications and inclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Mo., and marked on the outside: "Proposal for 15 Million Gallon Storage Basin."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or Trust Company, made payable to the City Comptroller, in the amount of $1,500, which deposit shall be forfeited to the city in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.
W. G. GOODWIN,
Chief Engineer and Superintendent.

Bids: March 31.

Highway Work

Baltimore, Maryland.

Sealed proposals for guilding one section of State Highway, as follows:

Contract No. A-13, Allegany County. —One section of State Highway from Green Ridge to the West side of Polish Mountains, for a distance of 1.4 miles, oilbound macadam will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 31st day of March, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 17th day of March, 1919.

FRANK H. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 2.

Street Paving

Durham, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Durham, for the construction of a permanent pavement of approximately 30,000 sq.yd. until 3 o'clock P.M., April 2, 1919, at which time they will be opened and publicly read at the Council Chamber of the said Board.

Plans and specifications of the proposed work may be had at the office of the City Engineer, between the hours of 9 A.M. and 5 P.M., from March 16, 1919 to April 2, 1919. Said specifications provide for the grading, drawing, curbing and paving with some suitable pavement on a six inch concrete base, Main Street from Fuller Street to Alston Ave. and also the submission of bids on 50,000 sq.yd. to 100,000 sq.yd. to be defined later.

The Board reserves the right to reject any or all bids, or to accept such bids as appear in its own judgment to be for the best interests of the City.

M. E. NEWSOM, Mayor,
GEO. W. WOODWARD, City Clerk,
J. L. MOOREHEAD, City Attorney,
H. W. KUEFFNER, City Engineer.

Bids: April 7.

Road Improvement

Camden, N. J.

Notice is hereby given that sealed bids will be received by Chas. F. Wise, Chairman of Road Committee for the widening and resurfacing of a portion of the Camden, Ellisburg and Marlton Turnpike Road, in the County of Camden, with a bituminous surface upon an old Telford and new Telford foundation; estimated amount of surface pavement required is 5640.19 tons of bituminous concrete, of foundation 9471.9 tons of new stone; and opened and read in public at public meeting in the Court House in Camden, N. J., on Monday, April 7, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by J. J. Albertson, Camden County Engineer, and approved by the State Highway Department, have been filed in the office of the said engineer at the Court House in Camden, and of said State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Chas. F. Wise, Chairman, Road Committee, Court House, Camden, N. J., and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Board of Chosen Freeholders of the County of Camden, N. J.

FRED W. GEORGE, Clerk.
March 17, 1919.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: April 10.

Earth and Concrete Levee

Newport, Arkansas.

Sealed proposals will be received by the Board of Directors of the Newport Levee District, Jackson County, Arkansas, at Newport, Arkansas, until 2 o'clock P.M., April 10, 1919, for the construction of flood protection works, involving approximately the following principal quantities:

Earth embankment	297,500 cu.yd.
Concrete	2,150 cu.yd.
Reinforcing steel	65 tons
Miscellaneous cast iron and steel	5 tons
Wood sheet piling	116 M. ft. B.M.
Tile, 4 in. and 10 in. diameters	8,270 lin.ft.
Corrugated iron pipe—18 in. and 24 in. diameters.	550 lin.ft.
Cast iron or concrete pipe, 24 in. and 36 in. diameters	290 lin.ft.
Sluice gates, 24 in. diam.	4
36 in. diam.	4
48 in. diam.	2
Sodding embankments...	162,800 sq.yd.

The work is divided into three sections and proposals will be received for the entire work or for any section or combination of sections. Proposals must be submitted on the form furnished by the Board and must be accompanied by a certified check, payable to the Treasurer of the Newport Levee District, for not less than 5 per cent of the total amount of the bid, but in no case need the certified check exceed $5000.

Payments for the work will be made in cash.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF DIRECTORS NEWPORT
LEVEE DISTRICT.
By C. R. Hite, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: April 8.

Sewer Construction

College Hill, Pa.

Sealed proposals will be received by the undersigned, up to 6 o'clock P.M., April 8, 1919, for the construction of 28,000 ft. of sewer, more or less, with necessary manholes, flush tanks, etc. The pipe will be furnished by the Borough.

Plans and specifications are on file at the offices of H. P. Dawson, Borough Engineer, Colonial Theatre Bldg., Beaver Falls, Pa., and 341 Fourth Avenue, Pittsburgh, Pa.

Proposals shall be made on the blank forms to be obtained at the Borough Engineer's Offices.

A certified check for $1000 shall be enclosed in the sealed bids.

The Borough Council reserves the right to reject any or all bids.

JOHN LEEPER,
Secretary of Council.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.

OFFICIAL PROPOSALS

Bids: April 9.

Road Improvement

Hackensack, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of Bergen County for the improvement of Williams Avenue, Section No. 2, in the Boroughs of Hasbrouck Heights, Peterboro and Little Ferry in the County of Bergen with a 7½" to 10½" Portland Cement Concrete surface upon a cinder foundation; estimated amount of surface pavement required is 18,647 square yards, of foundation 10,640 cubic yards; and opened and read in public at Court House, Bergen County, New Jersey, on April 9th, 1919, at 2.30 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at Court House, Hackensack, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Road Committee, Bergen County Board of Chosen Freeholders, and must be accompanied by a certified check for not less than 10% of said bid, drawn to the order of the County Collector of Bergen County, N. J., and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of Bergen County Board of Chosen Freeholders.

JAS. M. HARKNESS,
Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Pleasant Street and on the Oak Hill Avenue Plat will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1200 ft. of segment block sewer, 33 and 45 in. in diameter, about 160 ft. of 20-in. brick sewer, about 2000 ft. of pipe sewer varying in diameter from 10 in. to 24 in., with the necessary catch-basins and manholes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: April 12.

Highway Construction

Johnstown, Pa.

Sealed proposals will be received in person by Webster Mosholder, President of the Board of Supervisors of Upper Yoder Township, Cambria County, Pennsylvania, at the office of Frank P. Barnhart, Solicitor for Upper Yoder Township, at his offices in the Swank building, in the City of Johnstown, Pennsylvania, promptly at 12 o'clock noon, Saturday, April 12, 1919, from the bidders in person or their duly constituted agents, at which time and place the bids will be opened and read in the presence of all bidders or their said agents, and the contracts awarded within five (5) days thereafter, for the reconstruction of approximately 28,500 lin.ft. of the Millcreek road in said township, extending from the line of the Borough of Westmont to the Ligonier Pike, with three-inch vitrified block on a concrete base.

At the same time and place and in the same manner, separate bids will be received, opened and read and the contracts awarded within five (5) days thereafter for furnishing the following items, namely:

3,500	M 3-in. vitrified blocks.
12,000	barrels of Portland cement.
2,000	lin.ft. of 24-in. reinforced concrete pipe.
2,000	lin.ft. of 30-in. reinforced concrete pipe.
2,000	lin.ft. of cast-iron pipe, sizes 12 in. to 24 inches.

The unloading from cars, hauling to the roadside and stacking of each of the above items.

All quantities are approximate.

Each proposal must be accompanied with a certified check to the amount of at least five (5) per centum of the total amount of the proposal, and the envelope enclosing the proposal must be marked "Proposal for the Reconstruction of the Millcreek Road."

Proposals must be submitted upon the blank forms provided for that purpose. The Supervisors reserve the right to reject any and all bids.

Plans, specifications and bidding blanks may be seen at the office of C. E. Brown, Township Engineer, third floor Hannan Building, Johnstown, Pennsylvania. A deposit of fifteen ($15) dollars will be required with request for plans and five ($5) dollars with request for specifications, which amount will be refunded upon return of the same with a bid.

WEBSTER MOSHOLDER,
CONRAD H. RAAB,
D. H. WEIMER,
Supervisors.
Frank P. Barnhart, Att. for Supervisors.
Swank Building.
Johnstown, Pa.

PROPOSALS FOR HIRE OF ROCK DRILLING PLANT AND FOR DREDGING.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 A.M., April 16, 1919, and then opened, for hire of rock drilling plant and for dredging in Buffalo River Entrance Channel, Buffalo Harbor, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: April 2.

Road Work

Paragould, Arkansas.

Notice is hereby given that the Board of Commissioners of Road Improvement, District No. 4, of Poinsett County, Arkansas, at the office of W. R. Heagler & Sons, in the city of Harrisburg, Arkansas, will until 2 P.M., on Wednesday, April 2, receive proposals for the performance of the following work:

Clearing, 43.4 acres; grubbing, 39 acres; furnishing and placing 797 lin.ft. 12-in. vitrified clay pipe, 491 lin.ft. 18-in. vitrified clay pipe; reinforced concrete abutments, 7 cu.yd.; reinforced concrete culverts, 75 cu.yd.; plain concrete end walls for pipe, 71.5 cu.yd.; 742 lin.ft. wood and pile bridges; 6840 ft. B.M. reflooring old steel bridges; moving one 25-ft. steel span about twenty-five feet to line; 97,000 cu.yd. excavation for roadway and ditches; furnish gravel and clay binder, haul and roll and finish hard surface on 16.38 miles road. The preceding quantities are approximate only.

All proposals must be made on blanks furnished by the engineers or may be had on application to the secretary of the Board of Commissioners, and must be accompanied by either a certified check or a proper and good proposal bond in the amount of one thousand dollars.

All proposals will be opened in public promptly at 2 P.M. on Wednesday, April 2, 1919, at the office of the Board of Commissioners.

The Board of Commissioners reserve the right to accept any or to reject any or all of the bids or proposals offered.

Plans, specifications and estimates may be had from the engineer, W. R. Heagler & Sons, Paragould, Arkansas, upon deposit of ten dollars, or may be seen at the office of the County Court of Poinsett County, in the City of Harrisburg, Arkansas.

L. B. STONE, President.
L. N. LANDERS, Secretary.
W. R. HEAGLER & SONS, Engineer,
Paragould, Arkansas.
March 10, 1919.

Bids: April 11.

Earth Dam, Filter Plant and Appurtenances

City of Jacksonville, Ill.

Sealed proposals for an Earth Dam and Filter Plant will be received by the City of Jacksonville until 12 o'clock noon, on the 11th day of April, 1919.

The work for which proposals are invited includes an earth dam about 600 ft. long, a concrete spillway, a water filtration plant of 1.5 million gallons capacity with all appurtenances, according to plans and specifications on file in the office of the City Engineer, Jacksonville, Ill., and of Pearse and Greeley, Engineers, 64 W. Randolph St., Chicago, Ill.

A certified check or surety bond acceptable to the City to the sum of $500 shall be deposited with each bid. Bids may be made on the dam and the filter plant as separate contracts, or together as one.

Plans and specifications may be secured upon deposit of $5.

The City Council reserves the right to reject any or all bids, waive any informality in the bids and to accept any bid which it deems most favorable to the City of Jacksonville.

The City of Jacksonville, Illinois.
By HENRY J. RODGERS,
Mayor.
R. L. PYATT, Clerk.
March 24, 1919.

OFFICIAL PROPOSALS

Bids: April 9.

Wood Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office, 2nd floor, City Hall, until 2 o'clock P.M. of April 9, 1919, for the manufacture and delivery f.o.b., cars in Kansas City, Kansas, on such railroad switches as the Board of Fire and Water Commissioners may designate and the furnishing of all necessary labor and materials to lay approximately 8000 lin.ft. of 48-in. wood pipe and specials in accordance with the plans, bill of material, and specifications on file in the office of the said Board of Fire and Water Commissioners.

Copies of the plans, bill of material, specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Chief Engineer of the Water Department.

Bids must be made upon the forms attached to the specifications and enclosed in a sealed envelope and addressed to the Board of Fire and Water Commissioners of Kansas City, Mo., and marked "Proposals for Furnishing and Laying 48-in. Wood Pipe."

A certified check on some solvent Kansas City bank or trust company for the amount of twenty-five hundred dollars, made payable to the City Comptroller, must be deposited with the City Comptroller, Kansas City, Mo., and his receipt therefor must accompany bid.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid when it appears to be to the interest of Kansas City (Mo.) so to do.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 9.

Concrete Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office, 2nd floor, in the City Hall, until 2 o'clock P.M. of April 9, 1919, for the manufacture and delivery f.o.b., cars in Kansas City, Kansas, on such railroad switches as the Board of Fire and Water Commissioners may designate and the furnishing of all necessary labor and material to lay approximately 8000 lin.ft. of 48-in. concrete pipe and specials in accordance with the plans, bill of material and specifications on file in the office of the said Board of Fire and Water Commissioners.

Copies of the plans, bill of material, specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Chief Engineer of the Water Department.

Bids must be made upon the forms attached to the specifications and enclosed in a sealed envelope and addressed to the Board of Fire and Water Commissioners of Kansas City, Mo., and marked, "Proposal for Furnishing and Laying 48-in. Concrete Pipe."

A certified check on some solvent Kansas City bank or trust company for the amount of twenty-five hundred dollars, made payable to the City Comptroller, must be deposited with the City Comptroller, Kansas City, Mo., and his receipt therefor must accompany bid.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid when it appears to be to the interest of Kansas City (Mo.) so to do.

J. RAY SAMUEL,
Purchasing Agent.

OFFICIAL PROPOSALS

Bids: April 9.

Steel Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office, 2nd floor, City Hall, until 2 o'clock P.M. of April 9, 1919, for the manufacture and delivery f.o.b. cars in Kansas City, Kansas, on such railroad switches as the Board of Fire and Water Commissioners may designate, and the furnishing of all necessary labor and material to lay approximately 8000 lin.ft. of 48-in. steel pipe and specials in accordance with the plans, bill of material and specifications on file in the office of the said Board of Fire and Water Commissioners.

Copies of the plans, bill of material, specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Chief Engineer of the Water Department.

Bids must be made upon the forms attached to the specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent of Kansas City, Mo., and marked, "Proposal for Furnishing and Laying 48-in. Steel Pipe."

A certified check on some solvent Kansas City bank or trust company for the amount of two thousand five hundred ($2500) dollars, made payable to City Comptroller, must be deposited with the City Comptroller, Kansas City, Mo., and his receipt therefor must accompany bid.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid when it appears to be to the interest of Kansas City, Mo., so to do.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 12.

Storm Water Drains

Buffalo, N. Y.

The Commissioner of Public Works will receive sealed proposals at Room No. 1, Municipal Building, Buffalo, N. Y., until 11 o'clock A.M., April 12, 1919, for the construction of an 8, 7 and 6 foot storm water drain, known as "The Sloan Drain."

It is to be about 11,000 ft. in length on which brick, segmental tile block or reinforced concrete pipe may be used in part or in whole. The first section is in sandy soil with water, the remainder in clay with some rock excavation required. Part may be constructed in tunnel at contractor's option.

Bids and contract will be on a lump sum basis, excepting a very small section. Bond for 50% or certified check for 10% required with bids.

Plans and specifications may be had by addressing City Engineer, No. 7 Municipal Building, Buffalo, N. Y.

Formal advertisement will be found in the Buffalo Commercial, Morning Express and Buffalo Engineer, March 24, 25, 31 and April 1, 1919.

This is not a formal advertisement.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

Bids: April 8.

Highway Work

Johnstown, Pa.

Sealed proposals will be received at the Office of the Superintendent of Streets and Public Improvements, City Hall, Johnstown, Pa., until 12 o'clock noon of Tuesday, April 8th, 1919, for curbing, grading and paving the following highways, also sanitary sewers, storm sewers, and their appurtenances, and one reinforced concrete culvert bridge, all in accordance with plans and specifications on file in the office of the City Engineer:

Highway	From	To	Estimated Quantity
GROUP NO. 1			
Franklin Street	Stephen Street	City Line	Brick Paving 11,625 sq.yds.
Derby Street	Franklin Street	Riddle Ave.	Brick Paving 3,602 sq.yds.
Derby Street	Franklin Street	Riddle Ave.	Storm Sewer 2058 lin.ft. 8" to 36"
GROUP NO. 2			
Fairfield Avenue	Butler Alley	St. Clair Run	Brick Paving 7047 sq.yds.
Cooper Avenue	End of Paving	City Line	Brick Paving 1373 sq.yds.
GROUP NO. 3			
Ridge Avenue	Horrocks Street	End of Ave.	Brick Paving 1540 sq.yds.
Ridge Avenue	Horrocks Street	End of Ave.	Sanitary Sewer 828 lin.ft. 8"
Ridge Avenue	Horrocks Street	End of Ave.	Storm Sewer 732 lin.ft. 8" to 15"
Church Avenue	Angle in Avenue	End of Str.	Brick Paving 1628 sq.yds.
Church Avenue	Angle in Avenue	End of Str.	Sanitary Sewer 726 lin.ft. 8"
GROUP NO. 4			
Central Avenue	Horner St. Bridge	Moxham Bridge	Brick Paving 1322 sq.yds.
Bell Alley	Cherry Street	Poplar Street	Brick Paving 684 sq.yds.
Bell Alley	Cherry Street	Poplar Street	Sanitary Sewer 540 lin.ft. 27"
GROUP NO. 5			
Fronheiser Street	McMillen St.	Murdock St.	Brick Paving 1545 sq.yds.
Fronheiser Street	McMillen St.	Murdock St.	Sanitary Sewer 558 lin.ft. 8" to 18"
McMillen Street	Ash Street	Von Lunen Rd.	Brick Paving 1084 sq.yds.
McMillen Street	Ash Street	Von Lunen Rd.	Sanitary Sewer 488 lin.ft. 8" to 18"
GROUP NO. 6			
Spring Street	Lemon Avenue	Butler Ave.	One-course Concrete Pavement 6536 sq.yds.
Spring Street	Lemon Avenue	Butler Ave.	Sanitary Sewer 2000 lin.ft. 8"
Bradley Alley	Second Avenue	Third Ave.	One-course Concrete Pavement 570 sq.yds.
GROUP NO. 7			
"I" Street	Fairfield Ave.	Barron Ave.	One-course Concrete Pavement 522 sq.yds.
"I" Street	Fairfield Ave.	Barron Ave.	Sanitary Sewer 308 lin.ft. 8"
"H" Street	Fairfield Ave.	Bheam Ave.	One-Course Concrete Pavement 1163 sq.yds.
"H" Street	Fairfield Ave.	Bheam Ave.	Sanitary Sewer 460 lin.ft. 8"
Paul Alley	Franklin Street	Kennedy Ave.	One-course Concrete Pavement 232 sq.yds.
CONTRACT NO. 8			
	Russel Avenue	Over Sams Runs	Reinforced concrete bridge 9207 lb. steel bars 154 cu.yds. Class A Concrete 97½ cu.yds. Class B Concrete 63 cu.yds. Excavation 84½ sq.yds. Paving.

Plans, specifications, and blank proposals can be obtained at the Office of the City Engineer on payment of $3.00 for each set or group, which will be refunded upon the day of the letting to those submitting bids, providing the plans and specifications are returned in good condition.

Each proposal must contain the full name of the party or parties presenting the same and all persons interested therein; and must be accompanied by a bond, duly and legally executed, for an amount which shall not be less than five per cent. (5% of the contract price, or a certified check for like amount, on a solvent bank, doing business in the City of Johnstown, Pa., and made payable without reservation to the order of the Treasurer of the City of Johnstown, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

All proposals must be made on the blank forms attached to the specifications, as none other will be accepted, and they shall be enclosed in an envelope, bearing the name and address of the bidder, marked "Proposal for Highway Improvements," and addressed to "The Superintendent of Streets and Public Improvements." Bids will be opened and publicly read at the regular session of City Council in their chambers at 2:00 o'clock p.m. on the same date.

The City reserves the right to reject any or all bids ,to waive irregularities, and to award the contract as may be deemed to the best interests of the City.

M. LEE MASTERTON,

Supt. of Streets and Public Improvements.

Bids: April 15 .

Dredging

FORMATION OF SECTION OF INLAND WATERWAY CONNECTING BARNEGAT BAY WITH THE MANASQUAN RIVER OFFICE OF BOARD OF COMMERCE AND NAVIGATION

State House, Trenton, N. J.

Sealed proposals for dredging a section of the proposed Inland Waterway connecting Barnegat Bay with the Manasquan River will be received at this office at 12 o'clock noon April 15, 1919, and then publicly opened. About $25,000.00 is available for this work. The right is reservedto reject any or all bids, or to waive informality in any bid if it may appear to the advantage of the State to do so.

Further information on application.

VICTOR GELINEAU,

Director.

March 25, 1919.

Proposal Advertisements

can be received at our New York office until

10 A. M. Wednesday

for publication in the issue of Engineering News-Record out the

Next Morning

When there is any doubt as to copy reaching us by mail by Wednesday morning, telegraph both copy and instructions as a

Night Letter

forwarding confirmation, copy and order by mail.

ENGINEERING
NEWS-RECORD

10th Ave. at 36th St., New York

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

Money can be saved by getting these men to figure on new work. Advertisements for bids published in ENGINEERING NEWS-RECORD secure maximum competition—the most bidding by the best bidders.

No work is too small, none too large, to be beyond the money-saving quality-insuring influence of NEWS-RECORD Proposal advertising. Cost is only $3.60 an inch.

Proposal ads invariably save large sums on contract prices.

Plans and specifications for work advertised in the Engineering News-Record may be filed without extra expense at our New York, Philadelphia, Cleveland, Chicago or San Francisco offices for the convenience of prospective bidders.

Engineering
News-Record
10th Ave. at 36th St.
New York

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OFFICIAL PROPOSALS

Bids: April 15.

Water Work System

Freeport, Ohio.

Sealed proposals will be received at the office of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, until six (6) o'clock P.M., of the fifteenth (15) day of April, 1919, and will be publicly opened and read by the Clerk in the Council Room for furnishing all tools, labor and materials and constructing certain improvements to the existing municipal water works system, including cast-iron pipe lines, valves, hydrants and appurtenances, in accordance with the plans and specifications now on file at the offices of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, and the W. J. Sherman Co., Engineers, Toledo, Ohio.

Copies of the bidding blanks, contract and specifications may be obtained from the undersigned.

Each bid must be accompanied by a surety company bond, a cash deposit or a certified check on some solvent bank, payable to the order of the Village Treasurer, for an amount equal to five (5) per cent of the aggregate amount of the bid, as a guarantee that if the bid is accepted a contract will be entered into and the required bond will be furnished for the faithful

Bids will be received on the whole or any portion of the work herein provided for.

The Board of Trustees of Public Affairs reserves the right to reject any or all bids received, to waive irregularities in the bids, in the interests of the village, and to adjust the extent of the work to the amount of the appropriation.

CHAS. LINARD, Clerk.

Bids: April 9.

Sanitary Work

Willard, N. Y.

Sealed proposals for Sanitary Work—Chlorinating Plant, Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M., on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3174. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: March 17, 1919.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

OFFICIAL PROPOSALS

Bids: April 10.

Paving

Farmville, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Farmville, N. C., at Town Hall in Farmville, N. C., until 2 P.M., April 10, 1919, for Street Improvements.

The work will consist of about:

25,000 or 50,000 sq.yd. of asphalt, bitulithic, brick or other pavement.
15,000 lin.ft. of granite or concrete curb.
15,000 lin.ft. of concrete gutter.
20,000 sq.yd. of sidewalk.

And the necessary grading and drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2,000.00 as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Farmville and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

R. E. BELCHER, Mayor.
T. E. JOYNER, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: April 22.

Drainage

Crowley, La.

Sealed bids will be received by the Iota-Longpoint Drainage District, at the office of Merrill Bernard, Civil Engineer, Crowley, Louisiana, on the following work in Acadia Parish, Louisiana.

Approximately 495,000 cu.yd. of excavation, in the construction of 50 miles of drainage ditches.

Bids will be opened at 2 P.M., April 22, 1919. All bids must be accompanied by a certified check made payable to the Board of Commissioners, Iota-Longpoint Drainage District, for the sum of $1000.

Contractors may see plans and specifications at the office of the engineer.

All bids must be made on blank form accompanying the specifications. The right is reserved to reject any or all bids.

IOTA-LONGPOINT DRAINAGE DISTRICT
L. F. MILNER,
President.

Bids: April 24.

Paving

Auburn, Me.

Sealed bids will be received until 10 A.M., Thursday, April 2ʻ 1919, by the City Manager, City Building, Auburn, Me., for the improving and paving of certain streets in said City with vitrified paving block or concrete, or granite block. The work contemplated is about 12,000 sq.yd. Plans and specifications may be seen at the office of the City Manager.

GEORGE W. BUMPUS,
City Clerk.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y. Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 17th day of April, 1919, for the construction of highways in the following counties:

ALBANY	(Approx. 1.45)
CHEMUNG	(Approx. 0.03)
ERIE	(two highways—5.25 & 5.78)
FULTON	(Approx. 4.90)
HERKIMER	(two highways—5.84 & 5.67)
ONEIDA	(two highways—6.15 & 5.74)
PUTNAM	(Approx. 1.61)
ST. LAWRENCE	(two highways—5.45 & 3.48)
TOMPKINS	(Approx. 2.46)
WASHINGTON	(Approx. 5.40)
WAYNE	(Approx. 2.99)
WYOMING	(Approx. 2.59)

And also for the following repair contracts:

CHENANGO	(one contract—resurfacing)
DUTCHESS	(tone contract—reconstruction)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids: April 11.

Furnishing Asphalt

STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the furnishing and delivering of 90,000 gallons of asphalt in wooden barrels or metal drums will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Friday, April 11, 1919, at which time they will be opened and read in public.

Bids must be made upon blank forms to be furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island .

The Board reserves the right to reject any and all bids.

Forms of specifications ,proposal and contract may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 31, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODWARD

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: April 8.

Highway Work

STATE ROADS COMMISSION

Baltimore, Maryland.

Sealed proposals for building **one section** of State Highway, as follows:

Contract No. T-11—Talbot County—One section of State Highway from St. Michaels to Claiborne, for a distance of 2.65 miles, concrete,

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans wfll be furnished by the Commission upon application and cash payment of $1.00 ,as hereafter no cahrges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 24th day of March, 1919.

FRANK A. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 15.

Pavement Construction

Pawtucket, R. I.

Sealed proposals will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Tuesday, April 15, 1919, for furnishing all materials and laying about 10,500 sq.yd. of grouted, granite block pavement on a concrete base in Main Street and about 7900 sq.yd. in School and Prospect Streets.

The above work will be let as two separate contracts.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be received from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: March 31.

Unloading and Loading Stone Chips

STATE ROADS COMMISSION

Baltimore, Maryland.

Sealed proposals for unloading and hauling stone chips, as follows:

Division	Tons
No. 1—Dorchester, Somerset, Wicomico, Worcester Counties..........	3,260
No. 2—Cecil, Kent, Queen Anne's, Talbot & Caroline Counties.........	8,161
No. 5—Carrol, Frederick (Part), Howard (Part), Montgomery (Part), and Baltimore (Part), Counties...	12,603
No. 6—Garrett, Washington and Frederick (Part) Counties.........	10,520

will be received by the State Roads Commission ,at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 31st day of March, 1919, at which time and place they will be publicly opened and read.

Bids must be mads upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred ($200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 24th day of March, 1919.

FRANK A. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

The right is reserved to increase or diminish the above quantities 20%.

Bids: April 11.

Dredging

Bridgeport, Conn.

Sealed proposals will be received at the office of the Clerk of the Board, by the Board of Park Commissioners of Bridgeport, Connecticut, for filling at Fayerweather Island Seaside Park up to 12 o'clock noon of April 11, 1919, at which time the proposals will be publicly opened.

Job includes about 40,000 cubic yards of suction dredging.

Plans and specifications can be obtained fro mthe Engineer, Alfred H. Terry, 886 Main Street, Bridgeport.

No proposal will be accepted unless accompanied by a certified check for $500 payable to the Treasurer of the City of Bridgeport.

The Board reserves the right to reject any and all bids.

B. F. COONEY, Clerk.
Security Building,
Bridgeport, Connecticut.

OFFICIAL PROPOSALS

Bids: April 7.

Street Improvements

ETC., ON THE GLOUCESTER HOUSING PROJECT, NOREG VILLAGE, CENTER TOWNSHIP, NEW JERSEY, FOR UNITED STATES SHIPPING BOARD,
EMERGENCY FLEET CORPORATION

Sealed proposals will be received at the office of William H. Boardman, Project Engineer, 426 Walnut Street, Philadelphia, Pa., until 12 o'clock noon, april 7th, 1919, for the construction of Street Pavements, Curbs, Gutters, Storm Water Inlet, Street Walks, House Walks, and work incidental thereto, on the Gloucester Housing Project, Noreg Village, Center Township, New Jersey, for United States Shipping Board, Emergency Fleet Corporation, according to Drawings and Specifications on file with the Project Engineer, and at that time and place the proposals will be publicly opened and read.

On and aftre March 28th plans, specifications, blank forms and all necessary information may be obtained from the Project Engineer, 426 Walnut Street, Philadelphia, and plans may also be seen at the Field Engineer's Office on the Project.

The approximate cost of the work to be done is $15,000.00. Each bid must be accompanied by a certified check drawn upon a National Bank or Trust Company in the amount of Twenty-Five Hundred Dollars, ($2500), payable to the United States Shipping Board, Emergency Fleet Corporation.

Only experienced and responsible bidders will be considered in awarding the Contract, and bidders may be required to submit evidence of experience and financial ability sufficient to warrant their undertaking the work and carrying it on to successful completion. The Owner does not obligate itself to accept the lowest, or any bid.

Bids: April 14.

Standpipe, 25 Ft. Diameter by 130 Ft. High; Concrete Foundation; Metal Work

City of Salem, N. J.

Sealed proposals, marked "Proposal for ("Standpipe Foundation," 'Standpipe Metal Work," or both), and addressed to W. A. W. Grier, Mayor, City of Salem, Salem, New Jersey, will be received until seven (7) o'clock P.M., on Monday, April 14th, 1919, at City Hall, Salem, New Jersey, for the furnishing of all of the materials and labor required for the installation of the said Standpipe Foundation and Metal Work.

Specifications and information may be obtained at the office of Mr. William H. Boardman, Engineer, 426 Walnut St., Philadelphia, or at the office of the undersigned.

A certified check for $200.00, drawn to the order of "The City Treasurer of the City of Salem, New Jersey," or equivalent bidder's bond, must accompany each proposal for the said Foundation, and for $500.00 for the said Metal Work.

The City of Salem reserves the right to reject any or all proposals, or to accept any proposal subject to such modifications as the Engineer may recommend at any time prior to the signing of the Contract.

N. S. HIRES,
Superintendent Water Department,
Room 6, Dunn Building,
Salem, New Jersey.

A wise Americaan once said
"Let those serve you most who serve you best"
"Nuf Sed"
See me—for your next
CONTRACT BOND
Harmon V. Swart
19 Liberty Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIO WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award ha sbeen made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per cenfum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: April 5.

Motor Vehicle Seals

Austin, Texas.

Proposals will be received until April 5th for 400,000 motor-vehicle seals, 3¼ x 5⅜ inches, bearing the following indicia in three lines:

Registered Motor Vehicle
1 2 3 4 5 6
Texas 1920

The seals shall be made of 34 gauge steel. The middle-line serial numbers shall be not less than ⅜ inches high, and shall run consecutively from 1 to 400,000.

STATE HIGHWAY DEPARTMENT,
Austin, Texas.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y. Sealed proposals will be received by the undersigned at their office, [illegible] 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 17th day of April, 1919, for the construction of highways in the following counties:

ALBANY	(Approx. 1.45)
CHEMUNG	(Approx. 0.03)
ERIE	(two highways—5.25 & 5.78)
FULTON	(Approx. 4.90)
HERKIMER	(two highways—5.84 & 5.67)
ONEIDA	(two highways—6.15 & 5.74)
PUTNAM	(Approx. 1.61)
ST. LAWRENCE	(two highways—5.45 & 3.48)
TOMPKINS	(Approx. 2.46)
WASHINGTON	(Approx. 5.40)
WAYNE	(Approx. 2.99)
WYOMING	(Approx. 2.59)

And also for the following repair contracts:

CHENANGO	(one contract—resurfacing)
DUTCHESS	(tone contract—reconstruction)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids: April 8.

Highway Work

STATE ROADS COMMISSION
Baltimore, Maryland.

Sealed proposals for building one section of State Highway, as follows:

Contract No. T-11—Talbot County—One section of State Highway from St. Michaels to Claiborne, for a distance of 2.65 miles, concrete,

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application and cash payment of $1.00 ,as hereafter no cahrges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 24th day of March, 1919.

FRANK A. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

OFFICIAL PROPOSALS

Bids: April 12.

Highway Construction

Johnstown, Pa.

Sealed proposals will be received in person by Webster Mosholder, President of the Board of Supervisors of Upper Yoder Township, Cambria County, Pennsylvania, at the office of Frank P. Barnhart, Solicitor for Upper Yoder Township, at his offices in the Swank building, in the City of Johnstown, Pennsylvania, promptly at 12 o'clock noon, Saturday, April 12, 1919, from the bidders in person or their duly constituted agents, at which time and place the bids will be opened and read in the presence of all bidders or their said agents, and the contracts awarded within five (5) days thereafter, for the reconstruction of approximately 28,500 lin.ft. of the Millcreek road in said township, extending from the line of the Borough of Westmont to the Ligonier Pike, with three-inch vitrified block on a concrete base.

At the same time and place and in the same manner, separate bids will be received, opened and read and the contracts awarded within five (5) days thereafter for furnishing the following items, namely:

3,500	M 3-in. vitrified blocks.
12,000	barrels of Portland cement.
2,000	lin.ft. of 24-in. reinforced concrete pipe.
2,000	lin.ft. of 30-in. reinforced concrete pipe.
2,000	lin.ft. of cast-iron pipe, sizes 12 in. to 24 inches.

The unloading from cars, hauling to the roadside and stacking of each of the above items.

All quantities are approximate.

Each proposal must be accompanied with a certified check to the amount of at least five (5) per centum of the total amount of the proposal, and the envelope enclosing the proposal must be marked "Proposal for the Reconstruction of the Millcreek Road."

Proposals must be submitted upon the blank forms provided for that purpose. The Supervisors reserve the right to reject any and all bids.

Plans, specifications and bidding blanks may be seen at the office of C. E. Brown, Township Engineer, third floor Hannan Building, Johnstown, Pennsylvania. A deposit of fifteen ($15) dollars will be required with request for plans and five ($5) dollars with request for specifications, which amount will be refunded upon return of the same with a bid.

WEBSTER MOSHOLDER,
CONRAD H. RAAB,
D. H. WEIMER,
Supervisors.
Frank P. Barnhart, Att. for Supervisors,
Swank Building,
Johnstown, Pa.

Bids: April 24.

Paving

Auburn, Me.

Sealed bids will be received until 10 A.M., Thursday, April 24, 1919, by the City Manager, City Building, Auburn, Me., for the improving and paving of certain streets in said City with vitrified paving block or concrete, or granite block. The work contemplated is about 12,000 sq.yd. Plans and specifications may be seen at the office of the City Manager.

GEORGE W. BUMPUS,
City Clerk.

OFFICIAL PROPOSALS

Bids: April 7.

Highway Work

Denver, Colo.

Bids will be received by the State Highway Commission of Colorado, at its offices in the Museum Building, Denver, Colorado, until 2 o'clock P.M., the 7th day of April, 1919, and will then be opened for the construction of State Highway No. 26, between Apache Creek via Walsenburg and Trinidad to Raton Pass.

Bids must be in a sealed envelope and labeled, "Proposal for the construction of State Highway No. 26, known as the 'Pueblo, Walsenburg, Trinidad Road'."

The State Highway Commission will not be responsible for the premature opening of bids not properly labeled.

A certified check for the sum of one thousand and five hundred ($1500) dollars, payable to the State Treasurer of Colorado, must be deposited with all bids for each section bid upon and receipt taken therefor, from the Secretary of the State Highway Commission.

Bids will be for the following classes of work:

Excavation other than rock.
Rock excavation.
Screened or crushed shale }
Screened or crushed gravel } Surfacing
Crushed rock }
Rubble wall.
Corrugated metal culverts.
Steel bridges.
Concrete, bridges and culverts.
Reinforcing steel.
Railing.

The work will be divided into four sections as shown on the proposal sheet. Bidders may bid upon one or more sections.

Each proposal must be for all the items for the section, and each proposal will be considered on the basis of the total of all the items for each section.

Bids must be upon the plans and specifications on file. Alternate plans or specifications will not be considered.

Plans and specifications will be on file in the office of the State Highway Commission, Museum Building, Denver, Colorado, and the office of the County Clerk at Trinidad and the County Clerk at Walsenburg, Colorado.

T. J. EHRHART,
State Highway Commissioner.

Attest:
N. A. BALLOU,
Secretary.

Bids: April 11.

Dredging

Bridgeport, Conn.

Sealed proposals will be received at the office of the Clerk of the Board, by the Board of Park Commissioners of Bridgeport, Connecticut, for filling at Fayerweather Island Seaside Park up to 12 o'clock noon of April 11, 1919, at which time the proposals will be publicly opened.

Job includes about 40,000 cubic yards of suction dredging.

Plans and specifications can be obtained fro mthe Engineer, Alfred H. Terry, 886 Main Street, Bridgeport.

No proposal will be accepted unless accompanied by a certified check for $500 payable to the Treasurer of the City of Bridgeport.

The Board reserves the right to reject any and all bids.

B. F. COONEY, Clerk.
Security Building,
Bridgeport, Connecticut.

OFFICIAL PROPOSALS

Bids: April 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 6, Mullica Hill—Mantua Section, concrete surface estimated 54,386 sq.yds., Gloucester County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 9, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department, at Trenton, N. J., and in the offices of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 15.

Road Surfacing

Greenville, Miss.

The Highway Commission of Washington County, Mississippi, will receive in their office in Greenville, Mississippi, up to 11 o'clock A.M., on Tuesday, the 15th day of April, 1919, sealed proposals for the surfacing of about 58.4 miles of road with concrete nine (9) feet wide, or gravel twelve (12) feet wide, as follows:

Greenville to head of Lake Washington	25.2 Miles
Head of Lake Washington to County line	8.9 Miles
Greenville to Metcalfe	4.4 Miles
Leland to Sunflower County line	10.2 Miles
Hollandale to Murphy Bayou	5.0 Miles
Arcola to Trail Lake	4.7 Miles

All in said County, according to the plans and specifications adopted by the Highway Commission, and on file in their office. All bids must be accompanied by a certified check in the sum of 5% of the amount of the contract bid upon, payable to the Chairman of the Highway Commission to guarantee execution of contract if awarded.

The Highway Commission reserves the right to reject any and all bids.

E. W. WOOD, Chairman.

OFFICIAL PROPOSALS

Bids: April 25.

Constructing 48-Inch Force Main

CONTRACT NO. 121
DEPARTMENT OF PUBLIC SERVICE
WATER WORKS IMPROVEMENT
CITY OF AKRON, OHIO

Sealed proposals for constructing a forty-eight inch pipe line and appurtenances will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until 12 o'clock noon, central standard time of Friday, the twenty-fifth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing and laying of approximately 2.3 miles of 48-in. pipe line, 0.1 mile of 36-in. pipe line, together with all appurtenances, between the Village of Kent and the Distributing Reservoir in Akron.

Bids will be received as follows:

Bid A.—For furnishing approximately 4400 tons of 48-in. cast iron pipe, 170 tons of 36-in. cast iron pipe and 230 tons of special castings.

Bid B.—For laying 2.3 miles of 48-in. cast iron pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

Bid C.—For furnishing and laying 2.3 miles of 48-in. steel pipe, 0.1 mile of 36-in. cast iron pipe and doing all appurtenant work.

All proposals must be made on the forms furnished by the city.

Each bidder must accompany his proposal with a satisfactory bond or certified check in the sum of ten thousand ($10,000) dollars.

A surety bond in the amount of fifty (50) per cent of the amount of the contract will be required of the successful bidder.

Plans and specifications may be seen at the office of the Director or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio, upon deposit of ten ($10) dollars, which sum will be refunded on return of the plans and specifications in good condition within ten days after the award of the contract.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works.
G. G. DIXON, Engineer.

Bids: April 15.

Pavement Construction

Pawtucket, R. I.

Sealed proposals will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Tuesday, April 15, 1919, for furnishing all materials and laying about 10,500 sq.yd. of grouted, granite block pavement on a concrete base in Main Street and about 7900 sq.yd. in School and Prospect Streets.

The above work will be let as two separate contracts.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be received from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

OFFICIAL PROPOSALS

Bids: April 7.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the construction of Malaga-Penn Grove road, 3rd Section, in the Borough of Woodstown and Township of Pilesgrove in the County of Salem with a gravel surface upon an earth foundation; estimated amount of surface pavement required is 42,120 sq.yd.; and opened and read in public at the Freeholders' Room, Court House, Salem, N. J., on Monday, April 7, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at the State House, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board, and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the county of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 10.

Paving

Farmville, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Farmville, N. C., at Town Hall in Farmville, N. C., until 2 P.M., April 10, 1919, for Street Improvements.

The work will consist of about:

25,000 or 50,000 sq.yd. of asphalt, bitulithic, brick or other pavement.
15,000 lin.ft. of granite or concrete curb.
15,000 lin.ft. of concrete gutter.
20,000 sq.yd. of sidewalk.

And the necessary grading and drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $2,000.00 as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Farmville and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

R. E. BELCHER, Mayor.
T. E. JOYNER, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

OFFICIAL PROPOSALS

Bids: April 15.

Railroad Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11th FLOOR, MERSHON BUILDING—
1211 CHESTNUT STREET

Philadelphia, March 18, 1919.

Sealed proposals addressed to the undersigned, as above, will be received until 12 o'clock Noon on Tuesday, April 15, 1919, for constructing the first four sections of the Frankford, Bustleton and Byberry Surface Passenger Railway from Frankford to Bustleton, a distance of about six miles. Contract No. 701, authorized by Ordinance of Councils approved July 20, 1916.

The contract will include the grading, and the furnishing and laying of the track, and the construction of a 504 ft. steel viaduct. There will be about 15,900 lin.ft. of individual track of girder rail type with granite block paving and about 22,400 lin.ft. of individual track of "T" rail type with ballast.

Plans and specifications can be seen at the office of the Department on the 12th floor of the Mershon Building, and copies of same with blank forms of proposals will be supplied to intending bidders upon deposit of $10 which will be refunded upon the return of the plans.

Bidders must be skilled and regularly engaged in this class of work.

The Contractor will be required to comply with the Act of Assembly of July 18, 1917, relative to Workmen's Compensation insurance and must furnish proof of the acceptance of the said act and proof of insurance of liability thereunder, or a certificate of exemption therefrom.

No bid will be considered unless accompanied by a certificate from the city Solicitor that a proposal bond in the sum of Five Hundred Dollars ($500) has been filed in accordance with the provisions of an Ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interests of the City of Philadelphia.

WM. S. TWINING, Director.

Bids: April 11.

Furnishing Asphalt

STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the furnishing and delivering of 90,000 gallons of asphalt in wooden barrels or metal drums will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Friday, April 11, 1919, at which time they will be opened and read in public.

Bids must be made upon blank forms to be furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island .

The Board reserves the right to reject any and all bids.

Forms of specifications ,proposal and contract may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Monday, March 31, 1919, every week day (except holidays and Saturdays) between the hours of 9 A.M. and 5 P.M., Saturdays 9 A.M. to 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODWARD

OFFICIAL PROPOSALS

Bids: April 11.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., April 11, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 6915 lin.ft. of reinforced concrete, also 43,391 ft. of bituminous surface course on a concrete foundation in Allegheny County; 16,362 ft. of bituminous surface course on a concrete foundation in Bradford County; 8000 ft. of reinforced concrete in Franklin County; 15,020 ft. of reinforced concrete in Fulton County; 20,720 ft. of bituminous surface course on a concrete foundation in Jefferson County; 28,815 ft., also 8916 ft. of bituminous surface course on a concrete foundation in Lackawanna County; 20,366 ft. of bituminous surface course on a concrete foundation in Northumberland County; 29,546 ft. of bituminous surface course on a concrete foundation in Pike County; 9934 ft. of vitrified brick in McKean County, and 6675 ft. of reinforced concrete and Hillside vitrified brick, in Somerset County.

Bids will also be received for the resurfacing with bituminous mixtures on a prepared broken stone base of 39,824 ft. in Berks County, also 35,907 ft. and 38,282 ft. in Lebanon County.

Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg; 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. L. S. Sadler, State Highway Commissioner.

Bids: April 8.

Sanitary Sewers

OFFICIAL NOTICE NO. 5

Hagerstown, Maryland.

Published by the authority of the Sewerage Commission of Hagerstown, Maryland, sealed proposals for building intercepting storm and sanitary sewers in certain streets, alleys, rights-of-way secured and to be secured and other localities in the City of Hagerstown, will be received at the office of the Sewerage Commission in the Police Headquarters Building until 7:30, Tuesday, April 8, 1919, at which time and place during the session of the said Commissioners, the proposals will be publicly opened and read.

The work to be done embraces the building of approximately 2800 lin.ft. each of 18-in. sanitary and 66-in. storm water sewers with all manholes, inlets, foundations and appurtenances, both largely in tunnel.

On and after Thursday, March 13, 1919, specifications and blank forms of proposals can be obtained and detailed plans examined at the office of the Sewerage Commission and full sets of plans will be sent to any contractor on the receipt of $10, the sum to be returned upon the surrender of the plans in good condition within 30 days from the date of award.

The Sewerage Commission reserves the right to reject any and all bids.

(Signed) E. LEROY HEARD,
Secretary.
(Countersigned) WILLIAM WINGERT,
Chairman.

OFFICIAL PROPOSALS

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity in North Terrace Park, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe in North Terrace Park."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 9.

Sanitary Work

Willard, N. Y.

Sealed proposals for Sanitary Work—Chlorinating Plant, Willard State Hospital, Willard, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 P.M., on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3174. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Willard State Hospital, Willard, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: March 17, 1919.

OFFICIAL PROPOSALS

Bids: April 15.

Water Work System

Freeport, Ohio.

Sealed proposals will be received at the office of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, until six (6) o'clock P.M., of the fifteenth (15) day of April, 1919, and will be publicly opened and read by the Clerk in the Council Room for furnishing all tools, labor and materials and constructing certain improvements to the existing municipal water works system, including cast-iron pipe lines, valves, hydrants and appurtenances, in accordance with the plans and specifications now on file at the offices of the Clerk of the Board of Trustees of Public Affairs, Freeport, Ohio, and the W. J. Sherman Co., Engineers, Toledo, Ohio.

Copies of the bidding blanks, contract and specifications may be obtained from the undersigned.

Each bid must be accompanied by a surety company bond, a cash deposit or a certified check on some solvent bank, payable to the order of the Village Treasurer, for an amount equal to five (5) per cent of the aggregate amount of the bid, as a guarantee that if the bid is accepted a contract will be entered into and the required bond will be furnished for the faithful

Bids will be received on the whole or any portion of the work herein provided for.

The Board of Trustees of Public Affairs reserves the right to reject any or all bids received, to waive irregularities in the bids, in the interests of the village, and to adjust the extent of the work to the amount of the appropriation.

CHAS. LINARD, Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Cottage Street, Mendon Avenue and Benefit Street, will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1840 ft. of 60-in., 913 ft. of 50-in., 620 ft. of 44-in. brick, "lock joint" pipe, segment block or monolithic concrete sewers in excavation varying from 13 ft. to 25 ft. in depth, with all necessary bell-mouths, catch-basins and man-holes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL.
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

Bids: April 18.

Constructing, Draining and Paving Chatham County Public Roads

Savannah, Georgia.

Office of the Commissioners of Chatham county and Ex-officio Judges, Savannah, Georgia, March 14, 1919.

Bids will be received by Chatham county at the office of the commissioners of Chatham county in the county court house, Savannah, Georgia, until Friday, April 18, 1919, not later than 12 o'clock noon, Savannah city time, for furnishing all material and labor and constructing, draining and paving the public roads of Chatham county, Georgia hereinafter named. Plans and specifications can be had upon application to this office, and the payment of $50.00 to cover the cost of the detailed plans, should they be desired. Plans and specifications are, however, subject to inspection, in this office, without such payment.

Bids must be sealed and marked, "Proposal for constructing and paving public roads," and addressed to the Commissioners of Chatham County and Ex-officio Judges, and delivered at the office of the Commissioners of Chatham county at the county court house, Savannah, Georgia.

Terms and time of payment. Payment for each kind of work will be made on the basis stated in the specifications for that particular item and at the rate mentioned in the proposal or bid. Partial payments will be made monthly on or before the 15th day of each month, in accordance with the rules of the county commissioners, on the basis specified in the specifications for that particular item, and at the rate mentioned in the proposal. The total amounts of such payment at any time before final completion shall not exceed eighty-five per cent. (85%) of the relative value of the work done and material furnished, as estimated by the engineer. Estimates of the relative value of the material furnished and work performed will be made by the engineer on or before the last day of the month in which the material is furnished and the work done. Payment therefor will be made on or before the 15th day of the succeeding month. Whenever the total amount of work provided for by the contract shall have been performed and all parts of the work have been approved by the engineer, final estimate showing the value of the material and work will be prepared by the engineer as soon as the necessary measurements can be made. The amount of this estimate, less any sums that may have been deducted in accordance with the provisions of the contract, will be paid to the contractor within thirty days after the final estimate is forwarded by the engineer, provided that the contractor has properly maintained the road as required in the specifications.

No material merely delivered, but not worked into place, temporary work, false work, or the like, shall be included in such estimate and no payments will be allowed for such items.

Work under the contract for the Augusta and Port Wentworth roads and Lathrop avenue, from the corporate limits of the city of Savannah to Port Wentworth must be begun within thirty days after the signing of the contract therefor and completed within five months after such signing. Work on the Port Wentworth and Augusta roads, from Port Wentworth to the county line, shall be begun not later than five months after the signing of the contract and completed within nine months after such signing. Work on the Louisville road, from the limits of the city of Savannah to the county line, shall be begun within thirty days after the signing of the contract and completed within seven months thereafter. Work on the Ogeechee road, from the limits of the city of Savannah to the county line, shall be begun within thirty days from the signing of the contract and completed within seven months thereafter. Work on the Tybee road shall be begun within thirty days after the signing of the contract and completed within one and one-half years thereafter.

Further information, detail plans and specifications can be had by reference to this office and such plans and specifications are on file in this office and open to inspection.

Bidder's bond, check, etc. There must accompany each proposal or bid, a certified check, payable to the order of the Commissioners of Chatham County, Georgia, in a sum equal to five per cent. (5%) of the total of any bid, or a bidder's bond in like sum, acceptable to the county commissioners with a surety company as surety, which has a regular established agency at Savannah, Georgia.

The county reserves the right to reject any and all bids.

OLIVER T. BACON, C. C. C.
A. B. MOORE, C. C. C.
ALBERT WYLLY, C. C. C.
HARVEY GRANGER, C. C. C.
A. W. SOLOMON, C. C. C.

Bids: April 9.

Water Main

Ward's Island, N. Y.

Sealed proposals for Water Main, Manhattan State Hospital, Ward's Island, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accopmanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 2465 including Addenda No. 1. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: March 24, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids: April 17.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., April the 17th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into two 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.

LUND AND HILL, Engrs.
Little Rock, Arkansas.

Bids: April 17.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 17th day of April, 1919, at 2 P.M., in the Mayor's Office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from intersection North Mohawk street to City line, brick, bitulitic, tarvis, or concrete. Certified check 10% of amount of bid must accompany proposal. Successful bidder must file bond 50% of amount of contract.

EUGENE M. HERBERT,
Secretary.

Bids: April 22.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Salem for the reconstruction of Malaga-Penn Grove Road, 7th Section, in the Borough of Pennsgrove and Township of Upper Penns Neck, in the County of Salem with a Bituminous Dressing (Sheet Asphalt) upon a Macadam foundation; estimated amount of surface pavement required is 27,804 square yards, of foundation 27,804 square yards; and opened and read in public at the Freeholders Room, Court House, Salem, N. J., on Tuesday, April 22, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer on proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board and must be acompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Pleasant Street and on the Oak Hill Avenue Plat will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1200 ft. of segment block sewer, 33 and 45 in. in diameter, about 160 ft. of 20-in. brick sewer, about 2000 ft. of pipe sewer varying in diameter from 10 in. to 24 in., with the necessary catch-basins and manholes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

Bids: April 16.

Bridge Structure

SUBSTRUCTURE AND
SUPERSTRUCTURE
SCHERZER ROLLING LIFT BRIDGE
AND APPROACHES
CITY OF OSHKOSH, WISCONSIN

Sealed proposals will be received by the Board of Public Works of the City of Oshkosh, at the City Hall, until 12 o'clock noon of April 16, 1919, for the construction of a new bridge, to replace the present bridge, across the Fox River at Oregon and Jackson Street.

Proposals shall be made for the removal of the existing bridge substructure, the construction of the piers, fenders, abutments, retaining walls, hand railing, filling and paving the approach roadway, walks and constructing and erecting complete, ready for operation and traffic, a deck highway bridge superstructure consisting of six approach spans and one Scherzer Rolling Lift Span, having a total length of 470 feet face to face of abutments, and a width of 38 feet center to center of sidewalk hand rails. All work shall be fully completed and the bridge in service on or before January 1, 1920.

Printed forms for these proposals, giving estimates of quantities and information relating to the work, contracts and contract bonds and plans and specifications of all portions of the work may be had upon application to the Board of Public Works of the City of Oshkosh, accompanied by check to the order of the City of Oshkosh, for the sum of Five Dollars for each set thereof. No bid will be considered unless accompanied by the contract and bond provided by the city, completely executed, with the exception of the signatures on the part of the city. The amount of the bond submitted shall be the entire contract price; and the right is hereby reserved to reject any and all bids.

WM. F. PORATH
G. H. RANDALL
ALBERT MARCH
FREDERIC J. EATON
BOARD OF PUBLIC WORKS,
City of Oshkosh, Wisconsin.
SCHERZER ROLLING LIFT BRIDGE
COMPANY, Engineers.
March 27, 1919.

Bids: April 15 .

Dredging

FORMATION OF SECTION OF INLAND
WATERWAY CONNECTING BARNEGAT
BAY WITH THE MANASQUAN RIVER
OFFICE OF BOARD OF COMMERCE
AND NAVIGATION

State House, Trenton, N. J.

Sealed proposals for dredging a section of the proposed Inland Waterway connecting Barnegat Bay with the Manasquan River will be received at this office at 12 o'clock noon April 15, 1919, and then publicly opened. About $25,000.00 is available for this work. The right is reservedto reject any or all bids, or to waive informality in any bid if it may appear to the advantage of the State to do so.

Further information on application.

VICTOR GELINEAU,
Director.
March 25, 1919.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity at 75th & Holmes Street, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe, 75th & Holmes Street."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller, in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

Bids: April 18.

Metering Feed Water Heater

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATER WORKS
IMPROVEMENT
CONTRACT NO. 140

City of Akron, Ohio.

Sealed bids for Furnishing Metering Feed Water Heater will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until twelve o'clock noon, Central Standard Time, of Friday the eighteenth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes the furnishing of one vertical open metering feed water heater, meter to be equipped with indicating, recording, and integrating device, exhaust steam to be supplied to heater at approximately three pounds back pressure.

All proposals must be made on the blank forms furnished by the City; each proposal must be accompanied by a certified check on some solvent bank in the sum of One Hundred Dollars ($100.00).

A satisfactory bond in the sum of fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

The specifications and the proposal, contract and bond forms may be seen at the office of the director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent Water Works.
G. G. DIXON, Engineer.

OFFICIAL PROPOSALS

Bids: April 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS
Providence, R. I.

Sealed proposals for the furnishing and applying of 485,000 gallons of asphaltic oil or of refined tar to the macadam sections of State highway in Rhode Island will be received by the State Board of Public Roads at its office, State House, Providence, R. I. until 12 o'clock noon on Wednesday, April 16, 1919, at which time they will be opened and read in public.

The roads to be treated are divided into three divisions and separate bids will be received for furnishing and applying of oil or of tar to the roads in each division.

Bids must be made upon forms furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids.

Forms of specifications, proposal and contract may be obtained at the office of the State Board of Public Roads, Providence, R. I., on and after Tuesday, April 1, 1919, between the hours of 9 A.M. and 5 P.M., Saturdays between 9 A.M. and 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODARD

Bids: April 11.

Street Paving

Lorain, Ohio.

Sealed proposals will be received by R. Winthrop Pratt, representing U. S. Shipping Board, Emergency Fleet Corporation, for the construction of approximately 27,000 square yards of concrete street paving, until twelve o'clock noon of the 11th day of April, 1919, at which time they will be publicly opened and read in the Council Chamber, City Hall, Lorain, Ohio.

Plans and specifications for the proposed work may be obtained at the office of R. Winthrop Pratt, 814 Hippodrome Building, Cleveland, Ohio. Said specifications provide for the grading, draining and paving of streets in the Federal Home Building Company's Allotment, Lorain, Ohio.

The right is reserved to reject any or all bids, waive any informalities in the bids received and to accept any bid which is deemed most favorable to the U. S. Shipping Board.

R. WINTHROP PRATT,
Local Project Engineer.

Bids: April 15.

Excavation and Grading

Pawtucket, R. I.

Sealed proposals addressed to the Commissioner of Public Works and endorsed Proposals for Grading will be received at the office of City Engineer in Masonic Building, until 10 o'clock of Tuesday, April 15, 1919.

Plans can be seen at the office of the City Engineer. The amount of material to be excavated is approximately 19,000 cubic yards.

A certified check for the sum of $200.00 made payable to John B. Reilley, City Treasurer, must accompany each bid and a surety bond for the sum of $2000.00 will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 27, 1919.

OFFICIAL PROPOSALS

Bids: April 9.

Dining Room Accommodations

Ward's Island, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Dining Room Accommodations for Patients in Main Building, Manhattan State Hospital, Ward's Island, N. Y., will be received by the Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, April 9, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3124, including Addenda dated March 12, 1919, No. 3132, No. 3133 and No. 3134. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, 1715 Tribune Building and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: March 20, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: April 22.

Drainage

Crowley, La.

Sealed bids will be received by the Iota-Longpoint Drainage District, at the office of Merrill Bernard, Civil Engineer, Crowley, Louisiana, on the following work in Acadia Parish, Louisiana.

Approximately 495,000 cu.yd. of excavation, in the construction of 50 miles of drainage ditches.

Bids will be opened at 2 P.M., April 22, 1919. All bids must be accompanied by a certified check made payable to the Board of Commissioners, Iota-Longpoint Drainage District, for the sum of $1000.

Contractors may see plans and specifications at the office of the engineer.

All bids must be made on blank form accompanying the specifications. The right is reserved to reject any or all bids.

IOTA-LONGPOINT DRAINAGE DISTRICT
L. F. MILNER,
President.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

OFFICIAL PROPOSALS

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

PROPOSALS FOR HIRE OF ROCK DRILLING PLANT AND FOR DREDGING.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 A.M., April 16, 1919, and then opened, for hire of rock drilling plant and for dredging in Buffalo River Entrance Channel, Buffalo Harbor, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

PROPOSALS FOR REMOVING WRECK—U. S. Engineer Office, 540 Federal Building, Buffalo, N. Y.—Sealed proposals for removing wreck of Steamer Tempest from Erie Harbor, Pa., will be received here until 11 A.M., April 10, 1919, and then opened. Information on application.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals will be received here until 2 p.m., April 8, 1919, and then opened, for annual maintenance dredging in Connecticut River, below Hartford. Further information on application.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.
Bids: April 7.

Bids: April 8.

Bridge Letting

Lewisburg, W. Va.

Bids will be received by the County Court of Greenbrier County until noon, April 8, for the construction of a bridge across Culberson Creek, in the Williamsburg District of said County. Alternate plans, prepared by the contractors, will be accepted, as well as bids based on plans and specifications supplied by the Court, and in both cases plans and bids will be submitted covering,

First: A bridge of 2 spans, 30 ft. each, 12 ft. roadway, and

Second: One span, 50 ft., of the same width roadway.

Detail information may be had on request from Frank K. Rader, County Road Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Road Engineer

OFFICIAL PROPOSALS

Bids: April 24.

Des Plaines River Sewage Treatment Works

DES PLAINES RIVER SEWAGE TREAT-
THE SANITARY DISTRICT OF
CHICAGO

Chicago, Ill.

Sealed proposals, endorsed "Proposals for Des Plaines River Sewage Treatment Works" will be received by the Clerk of the Sanitary District of Chicago, at the office of said Sanitary District, Room 700, Number 910 South Michigan Avenue, Chicago, Illinois, until 12 noon, standard time, on Thursday, April 24, 1919, and will be opened publicly by the Board of Trustees of said Sanitary District at a meeting to be held on that day or at the first meeting thereafter.

The work for which tenders are invited includes the following divisions:

Division A.—Sewage Treatment Plant.

This includes excavation, concrete, reinforcing steel, cast iron piping, gate valves, tile piping, and miscellaneous material and equipment to construct an activated sludge plant.

Division C.—Structural Steel.

This includes the furnishing of steel columns, roof trusses, purlins, lintels, crane girders, crane rails, floor beams, wall plates, anchors, bolts, washers, etc., shop painted.

Division N.—Traveling Crane.

This includes the furnishing of a hand traveling crane.

Division O.—Pumping Machinery.

This includes the furnishing of three (3) 14 inch centrifugal pumps (in accordance with designs submitted by the Sanitary District) and miscellaneous appurtenances.

Division P.—Electrical Equipment.

This includes three (3) vertical shaft, squirrel cage induction motors, each 50 H.P.; four (4) horizontal shaft, slipping wound rotor motors, each 150 H.P.; two (2) horizontal shaft squirrel cage induction motors, comprising one (1) at 75 H.P. and one (1) at 30 H.P.; four (4) 300 K.V.A transformers, oil switch equipment and miscellaneous appurtenances.

Division R.—Blowers.

This includes furnishing six (6) blowers of the horizontal hydro-turbine type.

Division V.—Sluice Gates.

This includes furnishing miscellaneous sluice gates with floor stands and appurtenances.

Division W.—Venturi Meters.

This includes furnishing miscellaneous sewage and air eVnturi meters with recording and indicating apparatus.

The work called for under Division A is to be furnished and erected complete, with appurtenances, as shown on the detailed plans and specifications, at the Des Plaines Sewage Treatment Works of The Sanitary District of Chicago, Broadview, Illinois.

The equipment or material called for under Divisions C, N, O, P, R, V, W, is to be delivered, freight prepaid, on board cars, the Chicago and Northwestern Railway, Maywood, Ill.

Proposals may be made on one division or any number of divisions, complete, but not on any part of any one division. A proposal may also be made on all divisions as an entirety.

All proposals must be made on blank forms of proposal furnished by said Sanitary District and shall be made in accordance with and conform to all of the terms and conditions set forth in "Requirements for Bidding and Instructions to Bidders" attached thereto.

Specifications, forms of proposal and plans may be obtained upon deposit of the following amounts at the office of said Sanitary District, which sum or sums so deposited shall be refunded if said plans and specifications are returned in good condition within thirty days following the opening of bids.

Specifications and Forms of Proposal. For each Copy, Two Dollars and Fifty Cents ($2.50).

Plans of Treatment Works, Twenty dollars ($20.00).

Plans of Pumps, Twenty Dollars ($20.00)

Each proposal must be accompanied by a certified check on a responsible bank doing business in the City of Chicago, or U. S. government coupon bonds, payable to bearer, or cash, to the amount or amounts as follows:

Division A.—Sewage Treatment Plant, Fifteen Thousand Dollars ($15,000.00).

Division C.—Structural Steel, Five Hundred Dollars ($500.00).

Division N.—Traveling Crane, Three Hundred Dollars ($300.00).

Division O.—Pumping Machinery, One Thousand Dollars ($1000.00).

Division P.—Electrical Equipment, Two Thousand Dollars ($2000.00).

Division R.—Blowers, Eight Hundred Dollars ($800.00).

Division V.—Sluice Gates, Five Hundred Dollars ($500.00).

Division W.—Venturi Meters, Seven Hundred Dollars ($700.00).

In no event, however, is a total deposit required of more than Twenty Thousand Eight Hundred Dollars ($20,800.00).

The Board of Trustees of The Sanitary District of Chicago reserves the right to reject any or all proposals.

THE SANITARY DISTRICT OF CHICAGO
By JOHN McGILLEN, Clerk.
Chicago, March 29, 1919.

Put Public Buying on an Efficiency Basis

Now, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Thousands of reliable contractors and manufacturers constantly seek opportunities to bid on contracts for public work or supplies. They compete for it. That keeps public expenditures down. It makes the taxpayers' money go farther. It puts public buying on an efficient basis. It makes local bidders figure more closely.

These contractors and manufacturers naturally seek news of contracts where it is most plentiful. They read

ENGINEERING NEWS-RECORD

A Consolidation of Engineering News, Engineering Record and the Contractor

the best known and most widely read papers used for the advertising of contracts to be let. Practically every worth-while contractor and manufacturer who wants to figure on public contracts reads Engineering News-Record. No guessing. No uncertainty. Engineering News-Record, with its circulation of 32,000 copies weekly, reaches practically *all* the men who would be interested in advertised contracts.

Proposal Advertising Rate, $3.60 an inch an issue. (About 10 cents per thousand circulation.)

As a government, state or municipal engineer, or public official you should use this means of giving your taxpayers the biggest value for their money. Advertise your contracts in the News-Record—the one nationally recognized medium for this class of advertising.

Look at the Proposals in this issue and see how other communities use it.

0063

OFFICIAL PROPOSALS

*Bids: May 6.

Westerly Sewage Treatment Works

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, until 12 o'clock noon (Eastern Standard Time), May 6, 1919, for the construction of the Sewage Treatment Works at the Westerly site.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, outfall conduits, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Wooden piling	15,000 lin.ft.
Excavation	30,000 cu.yd.
Concrete	15,000 cu.yd.
Steel reinforcement	850 tons
C. I. piping	60 tons
Buildings	125,000 cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Commissioner of Engineering, Room No. 618, City Hall, after April 15, 1919. A deposit of fifteen dollars ($15) will be required for each set of plans and three dollars ($3) for each set of specifications taken from the above office. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above office, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Cleveland.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank for ten thousand dollars ($10,000), made payable to the City of Cleveland, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Commissioner of Engineering and delivered at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, previous to 12 o'clock noon (Eastern Standard Time) on the day specified.

The City reserves the right to reject any or all bids.

ED. SHATTUCK,
Commissioner of Purchases
and Supplies.

*This ad was published through error in March 20th issue.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 31, 1919.—Sealed proposals will be received at this office until 3 P.M., April 24, 1919, and then opened, for Lookout Gallery at the U. S. Post Office, Saginaw, Mich., in accordance with drawing No. 71 and this specification, copies of which may be had at the office of the Custodian or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: April 10.

Street Improvements, Etc.

ON THE GLOUCESTER HOUSING PROJECT, NOREG VILLAGE, CENTER TOWNSHIP, NEW JERSEY, FOR UNITED STATES SHIPPING BOARD.
EMERGENCY FLEET CORPORATION
CHANGE OF DATE

Sealed proposals will be received at the office of William H. Boardman, Project Engineer, 426 Walnut Street, Philadelphia, Pa., until 12 o'clock noon, April 10, 1919, for the construction of Street Pavements, Curbs, Gutters, Storm Water Inlet, Street Walks, House Walks, and work incidental thereto, on the Gloucester Housing Project, Noreg Village, Center Township, New Jersey, for United States Shipping Board, Emergency Fleet Corporation, according to Drawings and Specifications on file with the Project Engineer, and at that time and place the proposals will be publicly opened and read.

On and after March 28th plans, specifications, blank forms and all necessary information may be obtained from the Project Engineer, 426 Walnut Street, Philadelphia, and plans may also be seen at the Field Engineer's Office on the Project.

The approximate cost of the work to be done is $140,000. Each bid must be accompanied by a certified check drawn upon a National Bank or Trust Company in the amount of twenty-five hundred dollars ($2500), payable to the United States Shipping Board, Emergency Fleet Corporation.

Only experienced and responsible bidders will be considered in awarding the contract, and bidders may be required to submit evidence of experience and financial ability sufficient to warrant their undertaking the work and carrying it on to successful completion. The Owner does not obligate itself to accept the lowest, or any bid.

Bids: April 8.

Road Materials

Wilmington, Del.

Proposals addressed to the President of the Levy Court, Room 133 County Building, Wilmington, Delaware, will be received until 12 o'clock noon, Tuesday, April 8, 1919, for the following materials: Prices for Crushed Stone, Gravel, Slag, Road Tar and Oils and Asphalts, f.o.b. at the plant and at the different Railroad Stations in this county. Also prices for sweeping and applying Road Tar and Asphalt as per specifications on the different roads in this county. Prices for hauling Crushed Stone, Gravel and Slag per ton from Railroad Stations to the different roads in this county as per specifications.

Specifications and Bidding Blanks may be obtained at the office of the County Engineer, Room 133, County Building, on and after April 2, 1919. A certified check for the amount of $100 must accompany each bid. The Levy Court reserves the right to reject any and all bids.

CHARLES E. GRUBB,
County Engineer.

OFFICE OF THE COMMISSIONERS, D. C., March 28, 1919. Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on April 21, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners.

OFFICIAL PROPOSALS

Bids: April 24.

Water Works, Electric Light Plant and Sewerage

Benson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Benson, N. C., at the Town Hall in Benson, N. C., until 4 P.M., April 24, 1919, for water works, electric light plant and sewerage.

The work will consist of Deep Well and Pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, and about five miles of water pipe lines, about four miles of sewers and Sewage Disposal Plant; no bids on electric distribution system.

Proposals must be marked, "Proposal for Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for five per cent of the amount of bid, but not less than $250, as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Benson and at the office of the Engineer in Durham, N. C.; copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

Copies of plans may be obtained from the Engineer by depositing $10, which will be returned only upon the return of the plans in good condition within 3 weeks after the letting.

The right is reserved to reject any or all bids.

EZRA PARKER, Mayor.
L. GILBERT, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: April 16.

Furnishing Valves

WATER DEPARTMENT

Baltimore, Md.

Sealed proposals, in duplicate, addressed to the "Board of Awards" of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon, Wednesday, April 16, 1919, for furnishing and delivering the following valves to the Water Department, Baltimore, Maryland.

Iron Body Gate Valves
275— 4 in.
500— 6 in.
6— 8 in.
20—10 in.
10—12 in.
5—16 in.
5—20 in.

Specifications and proposal forms may be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after March 29, 1919. A charge of $5 will be made for each set of specifications. This amount will be refunded upon their return on or before April 25, 1919, in good condition. Specifications used in making a bid will be considered as returned.

All bids must be accompanied by a certified check of the bidder upon a clearing house bank, in the amount recited in the specifications, drawn to the order of the Mayor and City Council of Baltimore, Md. The successful bidder will be required to give satisfactory bond for the faithful performance of the agreement, equal in amount to the value of the contract.

The Board of Awards reserves the right to reject any or all bids.

WALTER E. LEE,
Water Engineer.

Approved:
J. BARRY MAHOOL,
Acting Pres. Board of Awards.

OFFICIAL PROPOSALS

Bids: April 7.

Paving

70,000 SQUARE YARDS OF PAVEMENT
39,000 FT. OF CURBING
Sanborn, Iowa.

Bids will be received by the Town Council until two o'clock P.M., on April 7th, 1919, for the Paving and Curbing of 56 Blocks, consisting of about 70,000 Square Yards and about 39,000 Ft. of Curbing.

The Pavement to be of Concrete, Brick, Asphaltic Concrete, Sheet Asphalt, or Bitulithic Pavement.

Plans and Specifications may be seen at the Office of Town Clerk, or at the Office of Engineer, Primghar, Iowa.

J. C. KERRIGAN, Engineer.

Bids: April 10.

Street Improvements

Notice is hereby given that time for receiving bids for street improvements, etc., on Gloucester Housing Project, Noreg Village, Center Township, New Jersey, has been extended to Thursday, April 10th, 1919.

SEE AD ON PAGE 83

POSITIONS VACANT

AN EXPERIENCED MAN wanted to do country engineering; must be qualified to do surveying as well as engineering. Apply at once to County Commissioners of Hodgeman Co., Jetmore, Kansas.

ARCHITECTURAL draughtsman wanted, general and structural; must be accurate and reliable; to take off quantities for general contractor; state all qualifications. P-89, Eng. News-Record, Chicago.

ASSISTANT city engineer wanted; accurate instrument man with experience in paving and municipal work; state fully education, experience and salary wanted. City Engineer, Mishawaka, Indiana.

CHIEF draftsman and designers wanted for state highway work in the Southwest; give qualifications and initial salary expected. P-115, Eng. News-Record, Chicago.

CIVIL engineer wanted immediately with experience on timber sheet pile dock construction; state experience, age, references, date aavilable and salary desired; several months' work on Lake Michigan. Address P-91, Engineering News-Record, Chicago.

DETAILER wanted—familiar with making shop drawings for structural steel and reinforcing concrete. State in detail experience, age, married or single, salary and date available. Mosher Mfg. Company, Dallas, Texas.

DRAFTSMAN with technical education, familiar with plant layouts and machinery; one with some knowledge of tanneries preferred; give full particulars as to experience, references and salary expected. Elk Tanniny Co., Engineering Department, Ridgway, Pa.

DRAFTSMAN, experienced on structural steet and plate work; must be competent to check drawings and list materials; state salary, experience and when available first letter. Address Box 386, Iola, Kansas.

EXPERIENCED draftsman wanted April 1st by consulting engineers long established Middle West, specializing water works and sewerage. Salary $150. Permanent employment if services satisfactory. Give full record and references. Address P-66, Engineering News-Record, Leader-News Bldg., Cleveland.

ENGINEERING salesman wanted for structural steel, reinforced concrete and fireproofing specialties; state age, experience and nationality; state salary considered and when you could report. Address Southern Engineering Co., Charlotte, N. C.

POSITIONS VACANT

FIRST-CLASS mechanical engineering draftsman wanted in architect's office; must be familiar with plumbing, heating and lighting layout for factory and office buildings; state age, experience in full, giving names of previous employers, character of work done with each, salary desired and earliest date for beginning work; location Detroit. P-88, Eng. News-Record, Chicago.

FOREMAN wanted, familiar with concrete, on sewage disposal and water supply work by New York contractors; state age, salary expected and experience in detail. P-87, Eng. News-Record.

POSITIONS VACANT

FIRST-CLASS structural steel and reinforced concrete designer and draftsman wanted with several years' experience on all classes of building work. Also one or two reinforced concrete draftsmen, rapid, accurate and with good execution; state experience in full, giving names of past employers and character of work with each. Experience must have included detailing, structural steel and reinforced concrete. State salary desired and earliest date for beginning work. Location Middle West. P-42, Eng News-Record, Chicago.

NAMES and addresses wanted of competent English-Spanish translators in various localities east of Chicago, who can work part time. P-984, Eng. News-Record.

S. S. JOHNSON & BRO.

312 Chestnut St., Harrisburg, Pa

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

DRAFTSMEN WANTED

Experience on heavy machinery and structural work necessary.

F. C. AUSTIN & CO., INC.
Winthrop Harbor, Ill.

Worth Far More—
But No Extra Charge.

CONTRACT BONDS

Are not easy to get. Swart Engineering Insurance Service gives your application a far better chance.

SWART SERVICE REALLY SERVES

Phone—Wire—Write

HARMON V. SWART
19 Liberty Street, New York

"SEARCHLIGHT" Service

Action!

1—February 12

"Please quote me price for inserting the following For Sale ad in your publication."

S. E. WASHBURN, *City Eng.,*
Montgomery, Ala.

2—February 21

Following advertisement ordered:

Transit For Sale

One Gurley surveyor s transit, two verniers to limb, 5-inch needle, with 4½-inch verticle cycle, level on telescope, clamp and tangent to telescope, with tripod. All complete and in first-class condition. Recently overhauled. Price, $75.00. S. E. Washburn, City Engineer, Montgomery, Ala.

3—March 15

"I am this day in receipt of check for the transit. Many thanks for your assistance."

S. E. W.

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OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: April 17.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 17th day of April, 1919, at 2 P.M., in the Mayor's Office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from intersection North Mohawk street to City line, brick, bitulitic, tarvis, or concrete. Certified check 10% of amount of bid must accompany proposal. Successful bidder must file bond 50% of amount of contract.

EUGENE M. HERBERT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY
Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., April the 17th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into two 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.

LUND AND HILL, Engrs.
Little Rock, Arkansas.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders. It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Bids: April 17.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 17th day of April, 1919, at 2 P.M., in the Mayor's Office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from intersection North Mohawk street to City line, brick, bitulitic, tarvis, or concrete. Certified check 10% of amount of bid must accompany proposal. Successful bidder must file bond 50% of amount of contract.

EUGENE M. HERBERT,
Secretary.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY
Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., April the 17th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into two 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2;310	"
30" culverts	1,015	"
Plain concrete in headwalls.	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.

LUND AND HILL, Engrs.
Little Rock, Arkansas.

U. S. ENGINEER OFFICE, WHEELING, W. VA.—Sealed proposals will be received here until 11 A.M. (Eastern time), April 17, 1919, and then opened, for furnishing and delivering river-wall valve jacks for Dams Nos. 23, 25 and 27, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: April 18.

Furnishing Cast Iron Pipe and Special Castings

DEPARTMENT OF PUBLIC SERVICE
BUREAU OF WATERWORKS
IMPROVEMENT
CONTRACT NO. 131

City of Akron, Ohio.

Sealed proposals for Furnishing Cast Iron Pipe and Special Castings will be received at the office of the Director of Public Service, Delaware Building, Akron, Ohio, until twelve o'clock noon, Central Standard time of Friday the eighteenth day of April, 1919, at which time and place they will be publicly opened and read.

The contract includes approximately 140 tons of 36" Class "B" pipe, 11 tons of 30" Class "C" pipe, 88 tons of 12" Class "B" pipe, 70 tons of 10" Class "B" pipe, 15 tons of 8" Class "B" pipe, 30 tons of 8" Class "C" pipe, 130 tons of 6" Class "B" pipe, 60 tons of 6" Class "C" pipe, 10 tons of 4" Class "B" pipe, 20 tons of 4" Class "C" pipe and 124 tons of special castings.

All proposals must be made on the forms furnished by the City.

Each proposal must be accompanied by a satisfactory bond or certified check in the sum of Three Thousand Dollars ($3000.00). A surety bond in the sum of fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Specifications may be seen at the office of the Director, or copies may be obtained from the Bureau of Water Works Improvement, 102 E. Mill St., Akron, Ohio.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
H. H. FROST,
Superintendent of Water Works.
G. G. DIXON, Engineer.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Pleasant Street and on the Oak Hill Avenue Plat will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1200 ft. of segment block sewer, 33 and 45 in. in diameter, about 160 ft. of 20-in. brick sewer, about 2000 ft. of pipe sewer varying in diameter from 10 in. to 24 in., with the necessary catch-basins and manholes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 31, 1919.—Sealed proposals will be received at this office until 3 P.M., April 24, 1919, and then opened, for Lookout Gallery at the U. S. Post Office, Saginaw, Mich., in accordance with drawing No. 71 and this specification, copies of which may be had at the office of the Custodian or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: April 11.

Street Paving

Lorain, Ohio.

Sealed proposals will be received by R. Winthrop Pratt, representing U. S. Shipping Board, Emergency Fleet Corporation, for the construction of approximately 27,000 square yards of concrete street paving, until twelve o'clock noon of the 11th day of April, 1919, at which time they will be publicly opened and read in the Council Chamber, City Hall, Lorain, Ohio.

Plans and specifications for the proposed work may be obtained at the office of R. Winthrop Pratt, 814 Hippodrome Building, Cleveland, Ohio. Said specifications provide for the grading, draining and paving of streets in the Federal Home Building Company's Allotment, Lorain, Ohio.

The right is reserved to reject any or all bids, waive any informalities in the bids received and to accept any bid which is deemed most favorable to the U. S. Shipping Board.

R. WINTHROP PRATT,
Local Project Engineer.

Bids: April 15.

Pavement Construction

Pawtucket, R. I.

Sealed proposals will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Tuesday, April 15, 1919, for furnishing all materials and laying about 10,500 sq.yd. of grouted, granite block pavement on a concrete base in Main Street and about 7900 sq.yd. in School and Prospect Streets.

The above work will be let as two separate contracts.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be received from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

Bids: April 22.

Drainage

Crowley, La.

Sealed bids will be received by the Iota-Longpoint Drainage District, at the office of Merrill Bernard, Civil Engineer, Crowley, Louisiana, on the following work in Acadia Parish, Louisiana.

Approximately 495,000 cu.yd. of excavation, in the construction of 50 miles of drainage ditches.

Bids will be opened at 2 P.M., April 22, 1919. All bids must be accompanied by a certified check made payable to the Board of Commissioners, Iota-Longpoint Drainage District, for the sum of $1000.

Contractors may see plans and specifications at the office of the engineer.

All bids must be made on blank form accompanying the specifications. The right is reserved to reject any or all bids.

IOTA-LONGPOINT DRAINAGE DISTRICT
L. F. MILNER,
President.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

OFFICIAL PROPOSALS

Bids: April 15.

Excavation and Grading

Pawtucket, R. I.

Sealed proposals addressed to the Commissioner of Public Works and endorsed Proposals for Grading will be received at the office of City Engineer in Masonic Building, until 10 o'clock of Tuesday, April 15, 1919.

Plans can be seen at the office of the City Engineer. The amount of material to be excavated is approximately 19,000 cubic yards.

A certified check for the sum of $200.00 made payable to John B. Reilley, City Treasurer, must accompany each bid and a surety bond for the sum of $2000.00 will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL,
Commissioner of Public Works.
Pawtucket, R. I.
March 27, 1919.

Bids: April 28.

Repairing and Repainting

Lancaster, Pa.

Sealed proposals for repairing and repainting the outside of the Lancaster County Court House, will be received at the office of the County Commissioners, Lancaster, Pa., until 11 o'clock a.m., Monday, April 28, 1919; they will be publicly opened and read at noon on said date.

Specifications and necessary information are obtainable at the office of the said County Commissioners.

A certified check, payable to the order of the County of Lancaster, for ten per cent. of the amount bid, must accompany the proposal.

The Commissioners reserve the right to reject any or all bids.

ENOS E. MOWRER, County Controller.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.
Bids: April 7.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

PROPOSALS FOR HIRE OF ROCK DRILLING PLANT AND FOR DREDGING.—U. S. Engineer Office, Buffalo, N. Y.—Sealed proposals will be received here until 11 A.M., April 16, 1919, and then opened, for hire of rock drilling plant and for dredging in Buffalo River Entrance Channel, Buffalo Harbor, N. Y. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

OFFICIAL PROPOSALS

Bids: April 22.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Salem for the reconstruction of Malaga-Penn Grove Road, 7th Section, in the Borough of Pennsgrove and Township of Upper Penns Neck, in the County of Salem with a Bituminous Dressing (sheet asphalt) upon a Macadam foundation; estimated amount of surface pavement required is 27,804 square yards, of foundation 27,804 square yards; and opened and read in public at the Freeholders Room, Court House, Salem, N. J., on Tuesday, April 22, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer of proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: April 17.

Sewer Construction

Pawtucket, R. I.

Sealed proposals for building sewers in Cottage Street, Mendon Avenue and Benefit Street, will be received at the office of the City Engineer, Masonic Building, Pawtucket, R. I., until 10 o'clock of Thursday, April 17, 1919.

The work consists of the furnishing of all materials and the building of about 1840 ft. of 60-in., 913 ft. of 50-in., 620 ft. of 44-in. brick, "lock joint" pipe, segment block or monolithic concrete sewers in excavation varying from 13 ft. to 25 ft. in depth, with all necessary bell-mouths, catch-basins and man-holes.

Plans and specifications can be obtained from the City Engineer.

A bond for the faithful execution of the contract will be required from the successful bidder.

The Commissioner of Public Works reserves the right to reject any or all bids.

ISAAC GILL.
Commissioner of Public Works.
Pawtucket, R. I.
March 21, 1919.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: April 15 .

Dredging

FORMATION OF SECTION OF INLAND WATERWAY CONNECTING BARNEGAT BAY WITH THE MANASQUAN RIVER OFFICE OF BOARD OF COMMERCE AND NAVIGATION

State House, Trenton, N. J.

Sealed proposals for dredging a section of the proposed Inland Waterway connecting Barnegat Bay with the Manasquan River will be received at this office at 12 o'clock noon April 15, 1919, and then publicly opened. About $25,000.00 is available for this work. The right is reservedto reject any or all bids, or to waive informality in any bid if it may appear to the advantage of the State to do so.

Further information on application.

VICTOR GELINEAU,
Director.
March 25, 1919.

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity in North Terrace Park, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe in North Terrace Park."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

PROPOSALS FO TRANSITS AND LEVELS.—Department of Agriculture, Bureau of Public Roads, Washington, D. C., April 4, 1919. Sealed proposals for furnishing sixty (60) No. 27-A Gurley Transits, complete, (or equal), and twenty-four (24) Buff and Buff 16½-in. telescope, erecting, engineers' Dumpy levels, complete. (or equal) will be received at the Office of the Chief Clerk, U. S. Department of Agriculture, until 2 P.M., April 15, 1919, and then opened. Right is reserved to increase or decrease the number not more than twenty-five per cent (25%). Each instrument to be engraved "Bureau of Public Roads, No. (to be supplied) U. S. Department of Agriculture." Envelopes containing proposals should be endorsed "Proposals for Transits and Levels," and addressed to R. M. Reese, Chairman, Board of Awards, U. S. Department of Agriculture, Washington, D. C.

OFFICIAL PROPOSALS

Bids: April 24.

Water Works, Electric Light Plant and Sewerage

Benson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Benson, N. C., at the Town Hall in Benson, N. C., until 4 P.M., April 24, 1919, for water works, electric light plant and sewerage.

The work will consist of Deep Well and Pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, and about five miles of water pipe lines, about four miles of sewers and Sewage Disposal Plant; no bids on electric distribution system.

Proposals must be marked, "Proposal for Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for five per cent of the amount of bid, but not less than $250, as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Benson and at the office of the Engineer in Durham, N. C.; copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

Copies of plans may be obtained from the Engineer by depositing $10, which will be returned only upon the return of the plans in good condition within 3 weeks after the letting.

The right is reserved to reject any or all bids.

EZRA PARKER, Mayor.
L. GILBERT, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: April 28.

Excavating Ditch

Sterling, Illinois.

Drainage Commissioners of Drainage District No. 1, Hahnaman Township, Whiteside County, Illinois, will receive bids, at office of Carl E. Sheldon, Sterling, Illinois, up to 2:00 p.m., April 28, 1919, for deepening, widening, etc., of ditch. Excavation required, 101,211 cu.yds. Length of ditch, 37,765 ft. Estimated cost, $26,666.42. Six highway bridges to be removed and replaced. Specifications, office of Carl E. Sheldon. Addition information, E. O. Hills, Engineer, Fulton, Illinois.

OFFICE OF THE COMMISSIONERS, D. C., March 28, 1919. Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on April 21, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners.

PROPOSALS FOR MARINE RAILWAY. U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

PROPOSALS FOR COAL—U. S. ENGINEER OFFICE, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock noon, April 16, 1919, and then opened, for furnishing 3000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

OFFICIAL PROPOSALS

Bids: May 2.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., May 2, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 40,004 linear feet of Reinforced Concrete & Hillside Vitrified Brick Paving, 18 feet wide, situated in Windsor Township, Berks County, and West Brunswick Township, Schuylkill County, on Route No. 141; 5443 Linear feet of Reinforced Concrete Pavement, 18 feet wide, situated in Duncansville Borough, Blair County, on Route No. 53; 16,177 Linear Feet of Vitrified Brick Paving, 18 feet wide, situated in Allegheny Township, Cambria County, on Route Nos. 53 and 276; 32,100 Linear Feet of Bituminous Surface and Hillside Vitrified Brick Pavement, 18 ft. wide, situated in Spring Township, Centre County, on Route No. 27; 21,626 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in W. Goshen & W. Whiteland Townships, Chester County, on Route No. 147; also 2334 Linear Feet of Reinforced Concrete Pavement, from 18′ to 32½′ in width, situated in Kennett Square Borough, Chester County, on Route No. 131; 26,648 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Paint and Elk Townships, Clarion County, on Route No. 65; also 1842 Linear Feet of Vitrified Brick Pavement, 16 and 35 feet wide, situated in Clarion Borough, Clarion County, on Route No. 65; 8414 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Walker and Formanagh Townships, Juniata County, on Route No. 31; 10,560 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Union Township, Luzerne County, on Route No. 4; also 22,452 Linear Feet of Bituminous Pavement, 18 feet wide, situated in Salem Township, Luzerne County, on Route No. 4; 26,310 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Charleston and Richmond Townships, Tioga County, on Route No. 21; also 10,717 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Broken Straw Township, Warren County, on Route No. 88. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

L. S. SADLER,
State Highway Commissioner.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

*Bids: May 6.

Westerly Sewage Treatment Works

Cleveland, Ohio.

Sealed proposals will be received at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, until 12 o'clock noon (Eastern Standard Time), May 6, 1919, for the construction of the Sewage Treatment Works at the Westerly site.

The work contemplated comprises the construction of grit chambers, two-story settling tanks, outfall conduits, buildings and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Wooden piling	15,000 lin.ft.
Excavation	30,000 cu.yd.
Concrete	15,000 cu.yd.
Steel reinforcement	850 tons
C. I. piping	60 tons
Buildings	125,000 cu.ft.

Copies of plans and specifications and blank proposals may be obtained at the office of the Commissioner of Engineering, Room No. 618, City Hall, after April 15, 1919. A deposit of fifteen dollars ($15) will be required for each set of plans and three dollars ($3) for each set of specifications taken from the above office. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good condition. Similar deposits will be required for additional sets of plans and specifications taken from the above office, there being no refund for their return. All checks for said plans and specifications shall be made payable to the City of Cleveland.

The proposal shall contain the full name and address of the party or parties making the same and all persons interested therein, and shall be accompanied by a proposal bond signed by a surety company authorized to do business in the State of Ohio or by a certified check on a solvent bank for ten thousand dollars ($10,000), made payable to the City of Cleveland, as surety that if the bid be accepted a contract will be entered into and the performance of it properly secured.

No proposal will be entertained unless made on the blanks furnished by the Commissioner of Engineering and delivered at the office of the Commissioner of Purchases and Supplies, Room No. 219, City Hall, previous to 12 o'clock noon (Eastern Standard Time) on the day specified.

The City reserves the right to reject any or all bids.

ED. SHATTUCK,
Commissioner of Purchases
and Supplies.

*This ad was published through error in March 20th issue.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

PROPOSALS FOR STERN WHEEL STEEL TOWBOAT "CAPTAIN CHAS. D. HARRIS."—Office, Mississippi River Commission, 1st and 2nd Districts, Custom House, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., April 25, 1919, and then opened, for furnishing one stern wheel steel towboat. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Re-Paving and Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed "Proposal for Re-paving and Sewer in South Main Street, from Thornton to Crosier" will be received at the office of the Director, Delaware Bldg., Akron, Ohio, until 12 o'clock noon, Central Standard time, of Wednesday, the 30th day of April, 1919, and at that time and place will be publicly opened and read.

The work includes removal of 6670 sq.yds. of old pavement and concrete base.

Removal of 4500 sq.yds. of pavement only.
Laying 6670 sq.yds. concrete base.
910 lin.ft. of 30″ to 36″ Trunk Sewer.
1680 lin.ft. 8″ to 24″ vitrified pipe sewer.
4800 lin.ft. 4″ sub-drain.
13 manholes.
21 street inlets.
Laying 11,175 sq.yds. stone block or brick pavement.

Each proposal must be accompanied by certified check in the sum of Five Hundred Dollars ($500.00).

A surety bond in the sum of Fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer, or can be obtained upon deposit of Five Dollars ($5.00), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE, Director Public Service.
E. A. ZEISLOFT, Chief Engineer.

Bids: April 23.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Missouri, at his office in the City Hall, until 2 o'clock p.m. of April 23, 1919, for designing and erecting a reinforced concrete stand pipe of 1,000,000 gallon capacity at 75th & Holmes Street, Kansas City, Missouri. All proposals shall be based upon and shall be in accordance with the general specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

Copies of Instructions to Bidders, Plans and Specifications, Form of Proposal, Form of Contract and Form of Bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specifications and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Missouri, and marked on the outside "Proposal for 1 Million Gallon Reinforced Concrete Stand Pipe, 75th & Holmes Street."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller, in the amount of $1500.00, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.

OFFICIAL PROPOSALS

Bids: April 17.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y. Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 17th day of April, 1919, for the construction of highways in the following counties:

ALBANY	(Approx. 1.45)
CHEMUNG	(Approx. 0.03)
ERIE	(two highways—5.25 & 5.78)
FULTON	(Approx. 4.90)
HERKIMER	(two highways—5.84 & 5.67)
ONEIDA	(two highways—6.15 & 5.74)
PUTNAM	(Approx. 1.61)
ST. LAWRENCE	(two highways—5.45 & 3.48)
TOMPKINS	(Approx. 2.46)
WASHINGTON	(Approx. 5.40)
WAYNE	(Approx. 2.99)
WYOMING	(Approx. 2.59)

And also for the following repair contracts:

CHENANGO	(one contract—resurfacing)
DUTCHESS	(tone contract—reconstruction)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids: April 29.

Bridge Construction

Franklin, Pa.

Sealed proposals will be received up to 1:00 P.M. on Tuesday, April 29, 1919, by the County Commissioners of Venango County, Pa., at the County Court House at Franklin, Pa., for the construction of the following work. Plans and specifications may be seen at the Court House or at the office of R. L. Phillips, County Bridge Engineer at Meadville, Pa.

1. Constructing New bridge over Scrubgrass Creek one mile north of Clintonville in Clinton Township, Venango County, Pa., known as the Crawford Bridge. For this bridge, bids will be received for the following types of structure.

A. Reinforced concrete bridge consisting of 66 ft. arch span, 15 ft. rise with three 16 ft. approach spans.

B. Stone Arch bridge with a span of 66 ft. and a rise of 20 ft.

C. A Pony Warren Truss Bridge 102.5 ft. span, 16 ft. roadway with a variety of floor types and with both cut stone and concrete abutments.

2. Constructing a new bridge over North Sandy Creek in the Borough of Polk, Venango County, Pa. Bids received for the following styles of structure.

A. Steel pony truss bridge of 45 ft. span with 18 ft. roadway and creosoted wood block floor.

B. Through Girder, reinforced concrete bridge of same span and roadway with concrete floor. Both types on reinforced concrete abutments.

3. Repairing present concrete floor with Tarvia KP and laying thereon a creosoted wood block floor on a 1 in. sand cushion on the Washington St. Bridge in Franklin, Pa. 1600 sq.yards.

VENANGO COUNTY COMMISSIONERS.

OFFICIAL PROPOSALS

Bids: April 23.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 23, 1919, for the road work on the Dixie Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois; in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois; and also in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with District Engineer R. L. Bell, plans may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
Iroquois	1	16	39,730
Iroquois	2	16	22,854
Iroquois	H—15d	16	5,600
Iroquois	4	16	20,999
Iroquois	H—15d	16	5,250
Kankakee	5	16	44,539
Kankakee	K—15d	16	11,161
Kankakee	6	16 & 18	37,757
Kankakee	7	18	35,079

Cement will be furnished on all sections by the Department of Public Works and Buildings or the County.

Sections 4 and H-15d will not be let separately from one another but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the printe accompanying the proposal forms.

By order of Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received until 12 o'clock noon, April 26, 1919, and then opened, for dredging for widening the channel to Newport News, Va. Further information on application.

OFFICIAL PROPOSALS

Bids: May 1.

Road Work

Danville, Ill.

1. Notice is hereby given that sealed proposals for the construction of roads in Vermilion County will be received at the office of the County Clerk, Court House, City of Danville, Illinois, until 2 o'clock P.M., May 1st, 1919, at which time and place during the meeting of the Board of Supervisors, the proposals will be publicly opened and read.

2. The proposed work comprises the construction of concrete and brick roads ten (10) feet wide with three (3) feet macadam or grave l shoulders together with all grading, shaping earth shoulders, reinforced concrete work, ditching, drainage and other incidental work as shown in detail on plans and specifications, on file in the office of the County Clerk, and Superintending Engineer.

3. Proposals shall be made on forms furnished by the County of Vermilion.

3a. Proposal blanks and also the forms of contract and bonds that the successful bidders will be required to execute are now on file in the offices of said County Clerk and said Superintending Engineer.

4. The Board of Supervisors reserves the right to reject any and all proposals, and to waive technicalities in any proposal.

4a. The Board of Supervisors reserves the right to withdraw from said opening of bids, at any time on or before April 25, 1919, any Subdivision or Subdivisions of said unfinished work, in case the bondsmen who are responsible to said County for the completion of such Subdivision or Subdivisions shall have taken over and undertaken the completion of such Subdivision or Subdivisions, and shall have made arrangements, satisfactory to this Board, to complete said work not later than said November 15, 1919; and that said Board reserves the right to reject bids on any part or parts of said work, if such bids seem to this Board to be too high, and to do any part or parts of said work under its own management and direction.

5. Bidders may furnish proposals on one or more of the fourteen Subdivisions of approximately four miles each, into which the work is divided.

6. All proposals must be accompanied by a certified check in the sum of two (2) per cent. of the total bid and made payable to the order of Robert H. Mater, County Treasurer of said County; said check to be returned unless in case of the acceptance of his proposal, the bidder should fail to execute a contract and file a bond in a sum equal to the amount of the bid within ten (10) days of the date of the acceptance of this proposal, in which case the check is to become the property of Vermilion County and is to be considered as payment of damages due to delay and other causes suffered by the county from neglect of the bidder to execute a contract.

7. Proposals must be addressed or delivered to said County Clerk, Court House, Danville, Illinois; marked plainly on the outside, "Proposal for the Construction of Vermilion County Bond Roads Subdivision Number ———."

Dated this 28th day of March A. D. 1919.

JOHN R. MOORE,
County Clerk of the County of Vermilion
in the State of Illinois.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A M., May 9. 1919. and then opened for furnishing Rock Crushers. Further information on application.

Bids: April 22.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building four sections of State Highway, as follows:

Carroll County, Contract C1-20: One section of Littlestown Pike from Town Limits of Westminster toward Union Mills, for a distance of 2.01 miles. (Concrete.)

Frederick and Washington Counties, Contract W-16A: One section of State Highway from Knoxville to Harpers Ferry, for a distance of 3.51 miles. (Concrete.)

Howard County, Contract Ho-12: One section of Clarksville Pike from Highland to Clarksville, for a distance of 2.51 miles. (Concrete.)

Kent County, Contract K-12: One section of Rock Hall to Swan Creek Road, near Edesville, for a distance of 3.03 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 22nd day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 3rd day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 24.

Cleaning Out Drainage Canals

Hyde Co., N. C.

Sealed proposals will be received by the board of drainage commissioners of the Mattamuskeet Drainage District of Hyde Co., North Carolina, for the cleaning out of approximately 30 miles of drainage canals containing approximately 850,000 cu. yd. of material, until 2 o'clock p.m., Thursday, April 24th, at the offices of the board of commissioners at New Holland, North Carolina.

Proposals will be received in either of the following forms:

Unit price, Cost plus percentage, and rental per hour of operation.

Each proposal must be accompanied by a certified check or bidder's bond executed by some surety company authorized to do business in the state of North Carolina for $1000 as guarantee that the successful bidder will enter into contract with the board of commissioners.

Bond will be required of the successful bidder in the sum of 50 per cent. of his estimated cost.

Right is reserved to reject any and all bids.

J. S. MANN, chairman.
K. L. PONZER, Vice chairman.
T. B. JONES, commissioner.
K. L. PONZER, engineer.

Bids: April 24.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS
Springfield, Ill.

Notice is hereby given that sealed proposals will be received at the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 24, 1919, for the road work on the Lincoln Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, and also in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois. Plans for the sections in Ogle, Lee and Dhiteside counties may be examined also in the office of District No. 2, H. E. Surman, District Engineer, Dixon National Bank, Dixon, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the district engineer in whose district the work is located, plans for the work in the respective districts may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
DuPage	1	18	22,433
DuPage	G	18	12,400
DuPage	2	18	9,660
DuPage	3	18	8,207
Kane	L—15d	18	17,851
Kane	4	18	25,631
Kane	5	18	24,311
Kane-DeKalb	6	18	22,591
DeKalb	7	18	25,083
DeKalb	G	16	14,400
DeKalb	8	16	8,352
DeKalb	18	6	5,337
DeKalb-Ogle	9	16	29,300
Ogle	E—15d	16	8,433
Lee	12	16	14,750
Lee	14	16	34,362
Lee	H—15d	16	14,719
Lee	15	16 & 18	34,330
Whiteside	17	16	24 687
Whiteside	H	16 & 18	10,135

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Sections 8 and 18 will not be let separately from one another, but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the print accompanying proposal forms.

By order of Department of Public Works & Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: April 24.

Storm Water Drain

Coatesville, Penn.

Sealed proposals, addressed to the City Clerk of Coatesville, Penn., will be received at the City Hall at Coatesville until 8 o'clock P.M., April 24th, 1919, for the construction of a storm water drain to replace "Gibbon's Run."

This drain will be approximately 5400 lineal feet in length and will vary in size from 87" to 36". The construction will be of brick, segmental tile block or reinforced concrete pipe in part or in whole. There will also be 25 manholes and 80 steam water inlets with the necessary vitrified pipe connections.

Plans and specifications are on file in the office of the City Engineer in Coatesville, Penn.

A set of plans and specifications may be obtained upon application to the undersigned accompanied by a deposit of Ten Dollars ($10.00) which will be refunded upon the return of the plans and specifications in good condition up to and including the date of letting.

Proposals shall be submitted upon blanks provided for this purpose by the undersigned, and shall be accompanied by a certified check for Five per cent. (5%) of the total amount of bid. A satisfactory surety bond in an amount equal to fifty per cent. (50%) of the contract will be required from the successful bidder.

The City Council reserves the right to reject any and all bids and to award the work as a whole or in part.

The Contractor must comply with all the requirements of the Workmen's Compensation Law of the State of Pennsylvania.

CHAS. A. NILES,
City Engineer.
WILLIAM S. G. COOK,
City Clerk.
GEORGE ROMMEL, JR.,
Special Assistant.

Bids: April 28.

Sanitary Sewer

Flagstaff, Arizona.

Up to 4 P.M., of the 28th day of April 1919, sealed bids will be received by the Town Clerk of Flagstaff, Arizona, for the construction and extension of a sanitary sewer system. Funds to the amount of $95,000 are available for the work.

Plans and specifications are on file at the office of the Town Clerk and may be obtained from Olmsted & Gillelen, 1112 Hollingsworth Building, Los Angeles, California, on payment of $1.50; the plans to remain the property of the bidder.

Certified check to the amount of 10% of the bid must accompany each bid. The Town retains the right to reject any and all bids.

ALEX. A. JOHNSTON,
Town Clerk

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

Bids: April 18.

Furnishing and Laying 30-in. Cast Iron River Crossing

City Hall, Bayonne, N. J.
April 4, 1919.

Sealed proposals will be received from 4 o'clock to 4:15 o'clock P.M., on Friday, April 18, 1919, by the Board of Commissioners of the City of Bayonne, in public meeting in the City Hall, and publicly opened and read at the last named hour, for the furnishing and providing of all materials, machinery and plant, and the performing of all necessary work required in the carrying out of two certain agreements—one dated November 18, 1918, made and entered into between the Mayor and Council of the City of Bayonne and the Federal Shipbuilding Company, and the other dated November 15, 1918, made and entered into between the Mayor and Council of the City of Bayonne, and the Blast Furnace Products Corporation, copies of which agreements are on file in the office of the City Clerk of Bayonne, and may be examined by proposed bidders.

The work is to be done under the supervision of and in accordance with the plans and specifications prepared by Morris R. Sherrerd, Consulting Engineer. The plans and specifications may be examined at his office, Room 214, 20 Clinton Street, Newark, N. J. Copies of the plans and specifications may be obtained at said office upon the deposit of ten dollars ($10), which deposit will be repaid upon the return of such plans and specifications, within thirty (30) days.

The work will include the furnishing and laying of approximately 3100 ft. of new 30-in. water pipe upon proper pile and timber foundation upon the east and west banks of the Hackensack River, and a double 30-in. cast-iron pipe with flexible joints in a trench to be dredged under the Hackensack River; with all necessary valves and connections thereto; also the taking up of about 3300 ft. of 30-in. cast-iron water pipe, now located upon the old right of way, on the east and west sides of the Hackensack River, and thoroughly cleaning and repainting the same inside and out, and removing and relaying the same upon the new right of way parallel with the said new 30-in. line; also the furnishing and laying, with necessary valves and appurtenances, of about 900 ft. of 18-in. cast-iron water pipe, 760 ft. of 12-in. cast-iron water pipe, and 700 ft. of 4-in. cast-iron water, pipe, all of said cast-iron pipe to be of Class B, American Water Works Standard.

The above embraces approximately the following quantities:

Furnishing and laying 950 tons of 30-in. flexible joint cast-iron pipe.

Furnishing and laying 520 tons of 30-in. cast-iron pipe.

Taking up and re-laying 3300 ft. of 30-in. cast-iron pipe.

Furnishing and laying 70 tons of 18-in. cast-iron pipe.

Furnishing and laying 30 tons of 12-in. cast-iron pipe.

Furnishing and laying 8 tons of 4-in. cast-iron pipe.

Furnishing and driving 1700 piles.

Dredging 100,000 cu.yd. in Hackensack River.

Placing 1000 cu.yd. of concrete.

Furnishing valves, hydrants and meters and other appurtenances.

All bids will state prices in writing as well as figures, and proposals must be accompanied by the consent in writing of a Surety Company qualified to do business in New Jersey, who shall at the time of putting in such proposal, qualify as to its responsibility in the amount of such proposal, and bind itself that if the contract be awarded to the person or persons making the proposals, the said Surety Company will, upon the awarding of such contract, become surety for the faithful performance of the said controct, and to protect all persons performing labor or furnishing materials therefor, as required by law, said contract bond to be in an amount equal to the contract price and in the form required by Chapter 75, Laws 1918.

All bids must be accompanied by a certified check for twenty-five thousand dollars ($25,000) to insure the City that if the person or persons to whom the contract may be awarded, shall omit or refuse to execute such contract, the City of Bayonne may deduct therefrom the expenses of reletting the contract and any difference between the sums to which said proposer would have been entitled upon the completion of the contract and that which the City of Bayonne might be obliged to pay to the person or persons by whom such contract should be finally executed, using the contract quantities as the basis of such comparison. The certified check of unsuccessful bidders to be returned upon the award of contract and certified check of successful bidder to be returned upon execution of contract and bond.

The Board of Commissioners of the City of Bayonne reserves the right to reject any proposal which may be informal, or the acceptance of which would be, in the judgment of the Commissioners, detrimental to the interests of the City.

By order of the Board of Commissioners of the City of Bayonne.

WM. P. LEE,
City Clerk.

MORRIS R. SHERRERD,
Consulting Engineer.

Bids: April 23.

Portions of Main Dam of the Scituate Reservoir, and Earth Roads

CITY OF PROVIDENCE,
WATER SUPPLY BOARD,

Providence, R. I.

Sealed proposals for building, during 1919, portions of the Main Dam of the Scituate Reservoir (contract 11), and for building an Earth Road about 3.5 miles in length (contract 10), both in the Town of Scituate, R. I., about 10 miles westerly from the City of Providence, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M., on Wednesday, April 23, 1919, at which time and place they will be publicly opened and read.

The Engineer's estimate in cubic yards of some of the main items are as follows: Contract 11—Earth excavation and borrow, 132,000; rock excavation, 3500; concrete masonry, 1500. Contract 10—Earth excavation and borrow, 24,000; rock excavation, 800; concrete masonry, 400.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.
B. THOMAS POTTER, Chairman,
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

Bids: May 5.

North Hill Viaduct

FOR
SUMMIT COUNTY,
AKRON, OHIO

Sealed proposals to be filed with L. M. Kauffman, Clerk, will be received by the Board of County Commissioners of Summit County, at Akron, Ohio, up to 9 A.M. o'clock (Central Standard time), May 5, 1919, for furnishing the materials and performing the labor necessary for the construction of the North Hill Viaduct in Akron, Ohio.

The viaduct will be of reinforced concrete with an over-all length of about 2790 ft. consisting of 16 arch spans varying in length from 116 ft. to 191 ft., and of 12 short girder spans. A roadway 52 ft. wide and two sidewalks, each 10 ft. wide are provided. Certain piers will rest on sand and gravel; others on concrete piles.

Payments will be made in cash and monthly estimates will be rendered. All bids shall be accompanied by a check of the bidder, certified to by a solvent bank in the State of Ohio, made payable to Board of County Commissioners, for an amount of five per cent of the bid, to be forfeited as liquidated damages (but not a penalty) by any bidder who is awarded a contract and who fails promptly and properly to execute the contract and bond. Upon the execution of the contract and bond by the successful bidder, said check will be returned to him and the checks of unsuccessful bidders will be returned to them. The contract will be awarded to the lowest responsible and competent bidder, but the Board reserves the right to reject any and all bids and to waive informalities.

Conforming to Ohio General Code, bids will also be received on alternate designs prepared by the bidder, providing certain requirements are complied with.

Plans and specifications are on file in the office of the County Engineer, the County Auditor, Akron, Ohio, and in the office of Harrington, Howard and Ash, Consulting Engineers, Kansas City, Missouri. Copies of the plans and specifications may be secured from the Consulting Engineers by depositing twenty-five dollars. Such plans and specifications are to be returned upon request, at which time refund of fifteen dollars will be made.

Bids: April 21.

Storm Sewers

Highland Park, N. J.
(New Brunswick P. O.)

Sealed proposals will be received by the Council of the Borough of Highland Park, at a meeting thereof to be held at the Fire House on Raritan Avenue, Highland Park, New Jersey, on Monday, April 21st, 1919, at 8 p.m., for the construction of Storm Sewers and drains in accordance with plans and specifications prepared for the same by John T. Hopkins, Borough Engineer, approved by said Council. Copies of said plans and specifications may be procured by application to said Borough Engineer at his office in said Fire House.

Said work will be divided in two contracts and bidders may submit proposals for one of said contracts or both of them. Such proposals must be submitted on separate blanks and each proposal must be accompanied by a certified check payable without condition to the order of said Borough of Highland Park for the sum of one thousand ($1000) dollars.

Council reserves the right to reject any and all bids.

ROBERT E. CRAIG,
Borough Clerk.

OFFICIAL PROPOSALS

Bids: May 15.

Dredging

Mobile, Alabama.

Notice is hereby given that the Board of City Commissioners of Mobile, Alabama, will receive bids up to twelve o'clock noon, Thursday, May 15th, 1919, for dredging a minimum of one million cubic yards (1,000,000) of material at the Arlington Pier, on Mobile Bay. Bids must be accompanied by a certified check for the sum of Five thousand dollars ($5000). The right is reserved by the board to increase the quantity and also to reject any or all bids. Specifications and information in regard to the work can be obtained from the City Engineer.

H. PILLANS,
Commissioner of Docks.

WRIGHT SMITH,
City Engineer.

Bids: May 7.

Paving

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of Main Street, Moorestown, in the township of Chester and the County of Burlington with sheet asphalt surface upon a concrete foundation; estimated amount of surface pavement required is 34,051 sq.yd., of foundation 34,051 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11 A.M.

Drawings, specifications and forms of bids, contract and bond for the proposed work, prepared by James Logan, County Engineer and Henry J. Sherman, Chester Township Engineer, have been filed in the office of said engineers at No. 11 Main St., Mt. Holly, N. J., and No. 306 Temple Bldg., Camden, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineers on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of the road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders and must be accompanied by a certificate from a Surety Company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineers.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.,
Clerk.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

THE STATE OF DELAWARE

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock P.M., April 30, 1919, and at that place and time publicly opened, for the construction of 14.5 miles of State Highway (cement concrete) in Kent and Sussex Counties, Delaware, involving the following approximate quantities:

CONTRACT NO. 10—4.5 MILES

4.0	acres Clearing and Grubbing
27,000	cu.yds. Grading
250	cu.yds. Concrete Masonry
15,000	pounds Reinforcement
60	lin.ft. 15 in. Reinf. Concrete Pipe
102	lin.ft. 18 in. Reinf. Concrete Pipe
170	lin.ft. 24 in. Reinf. Concrete Pipe
50	Bounds
40	tons Stone for Macadam
8,600	cu.yds. Cement Concrete Roadway
130	Joints

CONTRACT NO. 11—4.00 MILES

1.74	acres Clearing and Grubbing
19,500	cu.yds. Grading
240	cu.yds. Concrete Masonry
10,000	pounds Reinforcement
140	lin.ft. 15 in. Reinf. Concrete Pipe
204	lin.ft. 18 in. Reinf. Concrete Pipe
102	lin.ft. 24 in. Reinf. Concrete Pipe
136	lin.ft. 30 in. Reinf. Concrete Pipe
34	lin.ft. 36 in. Reinf. Concrete Pipe
46	Bounds
50	tons Stone for Macadam
7,655	cu.yds. Cement Concrete Roadway
125	Joints

CONTRACT NO. 12—5.97 MILES

11.6	acres Clearing and Grubbing
26,273	cu.yds. Grading
350	cu.yds. Concrete Masonry
10,000	pounds Reinforcement
165	lin.ft. 15 in. Reinf. Concrete Pipe
222	lin.ft. 18 in. Reinf. Concrete Pipe
238	lin.ft. 24 in. Reinf. Concrete Pipe
70	Bounds
50	tons Stone for Macadam
11,400	cu.yds. Cement Concrete Roadway
200	Joints

Bids may be submitted for one, all, or any combination of the three contracts.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed on or before December 1, 1919.

Monthly payments will be made for 90 per cent. of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) percentum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 10, No. 11, and No. 12."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after April 19, 1919, upon deposit of ($10.00) ten dollars which amount will be refunded upon return of plans and specifications in good condition at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.

CHAS. M. UPHAM, Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Wednesday, the 30th day of April, 1919, for the construction of highways in the following counties:

ALBANY: Two highways, 1.36 and 4.16.
CHEMUNG: Approx. 0.40.
CHENANGO: Three highways, 4.78, 5.57, 5.87.
CLINTON: Approx. 3.34.
ESSEX: Approx. 4.95.
FULTON: Approx. 2.80.
HAMILTON: Approx. 6.82.
ONEIDA: Two highways, 0.97 and 1.05.
ONONDAGA: Five highways, 0.96, 7.45, 2.37, 1.76, 3.75.
OSWEGO: Approx. 5.44.
WARREN: Approx. 4.59.
WAYNE: Two highways, 3.83 and 3.21.
WESTCHESTER: Two highways, 1.74 and 1.09.

And also for the following repair contracts:

BROOME: One contract, reconstruction.
HAMILTON: One contract, resurfacing.
JEFFERSON: One contract, resurfacing.
ONONDAGA: One contract, resurfacing.
OSWEGO: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "general Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

Bids: April 16.

Paving

Fulton, N. Y.

Sealed proposals will be received by the clerk of the city of Fulton, N. Y., until 8 o'clock p.m. on the 16th day of April, 1919, for the construction of pavements in the following named streets: East Fourth Street, Phillips Street, East Sixth Street, Worth Street, Highland Street, Buffalo Street, West Second Street, Leitch Street, Park Street, Division Street, VanBuren Street, Ganesvoort Street, West Sixth Street and East Third Street.

Plans and specifications and detailed information will be furnished by the city engineer upon application. A deposit of $10.00 will be required for every set of plans and specifications so furnished.

A certified check for ten per cent. of the amount of the bid, drawn to the order of the chemberlain of the city of Fulton must accompany each proposal.

The contract will be awarded on the type of construction selected by the board of public works to the lowest responsible bidder, who shall execute a bond to the city with sufficient surety for the faithful performance of the contract.

The board of public works reserves the right to reject all bids.

(Signed) JOHN FRAWLEY,
President of the Boar dof Public Works.

GEO. A. WASHBURN,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on Wednesday, May 14, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie county, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall masonry portion about 1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately 1000 feet long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 5.

Road Work

Fayetteville, W. Va.

Bids will be received up to May 5th, 1919, at the Office of J. K. McGrath, County Engineer, Fayetteville, West Va., for the grading of 10 miles of County road in Fayette County. This work is steam shovel and team work and will be let in two (2) sections of 5 miles each. Bids will be received on both sections, together or separately. There will be approximately 20,000 Cu.Yds. of excavation on each section. Specifications, bid sheets and all other necessary information can be had by applying to above named engineer. There will be a party on the ground to show bidders over the work May 1st, 1919.

A certified check of $1000.00 made payable to Thoney Pietro and Company, shall be filed wit heach bid. The right is reserved to reject any or all bids.

THONEY PIETRO & COMPANY
By JAMES CAIN.

Bids: April 28.

Road Repairing

Scranton, Pa.

Sealed proposals will be received in the office of the County Controller, Lackawanna County, Scranton, Pennsylvania, until 10:30 a.m., Monday, April 28th, 1919, for the repair of the County Road, running from the Luzerne County Line, through the Boroughs of Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn, Mayfield, the Townships of Carbondale and Fell, and the Borough of Vandling, to the boundary line of the County of Susquehanna.

Specifications, etc., are on file in the office of the County Commissioners of Lackawanna County, Court House, Scranton, Pa., and may be seen or had by bidders upon application.

Certified check for five (5%) per cent. of the amount of bid, drawn to the order of the County of Lackawanna, must be furnished wit heach proposal.

The right is reserved to reject any or all bids.

CHAS. P. SAVAGE,
County Controller.
Attest:
RALPH COLLINS,
Deputy County Controller.

OFFICIAL PROPOSALS

Bids: April 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC WORKS
Providence, R. I.

Sealed proposals for the furnishing and applying of 485,000 gallons of asphaltic oil or of refined tar to the macadam sections of State highway in Rhode Island will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 o'clock noon on Wednesday, April 16, 1919, at which time they will be opened and read in public.

The roads to be treated are divided into three divisions and separate bids will be received for furnishing and applying of oil or of tar to the roads in each division.

Bids must be made upon forms furnished by the Board.

All bids must be accompanied by a certified check for $200.00 payable to the State of Rhode Island.

OFFICIAL PROPOSALS

The Board reserves the right to reject any and all bids.

Forms of specifications, proposal and contract may be obtained at the office of the State Board of Public Roads, Providence, R. I., on and after Tuesday, April 1, 1919, between the hours of 9 A.M. and 5 P.M., Saturdays between 9 A.M. and 12 M.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BUREN
J. HENRY WOODARD

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

YOUR
Contract Bonds

Have them intelligently handled by an engineer who presents your case fully and clearly to the **underwriters.**

ENGINEERING INSURANCE SERVICE—
NO EXTRA CHARGE
Swart Service Really Serves
Phone—Wire—Write
HARMON V. SWART
19 Liberty Street, New York

"SEARCHLIGHT" Service

Action!

1—**February 12**

"Please quote me price for inserting the following For Sale ad in your publication."
S. E. Washburn, *City Eng.*,
Montgomery, Ala.

2—**February 21**

Following advertisement ordered:

Transit For Sale
One Gurley surveyor s transit, two verniers to limb, 5-inch needle, with 4½-inch verticle cycle, level on telescope, clamp and tangent to telescope, with tripod. All complete and in first-class condition. Recently overhauled. Price, $75.00. S. E. Washburn, City Engineer, Montgomery, Ala.

3—**March 15**

"I am this day in receipt of check for the transit. Many thanks for your assistance."
S. E. W.

0070

Put Public Buying on an Efficiency Basis

NOW, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Engineering News-Record

with a circulation of over 32,000 a week, reaches almost every worth-while contractor, manufacturer and dealer interested in public contracts.

Over 4,000 Official Proposals

have been published each year in Engineering News and Engineering Record, now consolidated as the Engineering News-Record. These small investments for advertising have invariably saved large sums on the contract prices. You can now cover the entire field and secure the greatest possible competition from reliable contractors by publishing your advertisements for bids in the

One Dominant Paper

This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

The One Nationally Recognized Medium for Proposal Advertising

Engineering News-Record

0052

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Wednesday, the 30th day of April, 1919, for the construction of highways in the following counties:

ALBANY: **Two highways, 1.36 and 4.16.**
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HAMILTON: **Approx. 6.82.**
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ONONDAGA: **Five highways, 0.96, 7.45,** 2.37, 1.76, 3.75.
OSWEGO: **Approx. 5.44.**
WARREN: **Approx. 4.59.**
WAYNE: **Two highways, 3.83 and 3.21.**
WESTCHESTER: **Two highways, 1.74 and 1.09.**

And also for the following repair contracts:

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JEFFERSON: **One contract, resurfacing.**
ONONDAGA: **One contract, resurfacing.**
OSWEGO: **One contract, resurfacing.**

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "general Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on **Wednesday, May 14,** 1919, for Contract 203, **for the construction of the Gilboa dam, in the Town of Gilboa,** Schoharie county, New York. **The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall** masonry portion about **1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately** 1000 feet long.

At the above place and time the bids will be **publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars** ($20) **in cash or its equivalent for each** pamphlet. **For further particulars apply to the office of the Principal Assistant Engineer at the above address.**

JOHN F. GALVIN, **President.**
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, **Secretary.**

OFFICIAL PROPOSALS

Bids: April 25.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building one **section** of State Highway, as follows:

PRINCE GEORGE COUNTY,
Contract WB-Z:

One section of Baltimore-Washington Boulevard between Laurel and Hyattsville. 0.5 miles of 20 ft. concrete roadway—11.14 miles of 3 ft. concrete shoulders on each side of present roadway.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., on the 25th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the plan proposal form which, with Specifications and plans, will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission **this 9th day of April, 1919.**

FRANK K. ZOUCK,
Chairman.

CLYDE H. WILSON, Secretary.

Bids: April 24.

Water Works, Electric Light Plant and Sewerage

Benson, N. C.

Sealed proposals will be received by the **Mayor and Board of Commissioners of the Town of Benson, N. C.,** at the Town Hall **in Benson, N. C.,** until 4 P.M., April 24, **1919, for water works,** electric light plant **and sewerage.**

The work will consist of Deep Well and Pump, combined water and electric station, 60 and 100 kw. units, boilers, pumps and reservoir, and about five miles of water pipe lines, about four miles of sewers and Sewage Disposal Plant; no bids on electric distribution system.

Proposals must be marked, "Proposal for Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for five per cent of the amount of bid, but not less than $250, as evidence of good faith.

Plans and Specifications will be on file at the Clerk's office in Benson and at the office of the Engineer in Durham, N. C.; copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

Copies of plans may be obtained from the Engineer by depositing $10, which, will be returned only upon the return of the plans in good condition within 3 weeks after the letting.

The right is reserved to reject any or all bids.

EZRA PARKER, Mayor.
L. GILBERT, Clerk.
GILBERT C. WHITE, Engineer,
Durham, N. C.

OFFICIAL PROPOSALS

Bids: May 14.

Highway Work

LITTLE ROCK AND HOT SPRINGS
HIGHWAY

CHANGE OF DATE
PREVIOUSLY ADVERTISED
BIDS TO CLOSE APRIL 17

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., May the 14th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into tow 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing.....	74	acres
Earth work	492,000	Cu.Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls.	392	Cu.Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq.Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu.Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.
LUND AND HILL, Engrs.
Little Rock, Arkansas.

PROPOSAL FOR FURNISHING AND PLACING SOIL AND SOD.—Office U. S. Engineer, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M., April 23, 1919, and then opened, for furnishing and placing soil and sod at the U. S. Reservation, Fort Crockett, Galveston, Texas. Further information on application.

PROPOSALS FOR LEVEE WORK.—**Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 110,000 cu.yd. of earthwork (75,000 cu.yd. hydraulic fill in old borrow pits; and 35,000 cu.yd. levee enlargement) in the Hunt Drainage Dist., Ill. Further information on application.**

OFFICIAL PROPOSALS

Bids: May 1.

Sewers, Water Mains, Disposal Plant, Storage Reservoir, Transmission Line, Pump and Filter.

La Grange, Georgia.

Proposals will be received by the undersigned until 12 o'clock noon, May 1, 1919, for the construction of approximately eleven miles of sewers, Disposal Plant, four miles of Water Mains, Storage Reservoir, two miles Transmission Line, one 500,000 gallon Filter and one 500 gallons per minute Horizontal, Centrifugal pump direct connected to motor, and the furnishing of all materials and labor entering therein.

Specifications may be procured and plans and profiles seen at the office of the City Engineer, LaGrange, Ga., and general information from the undersigned.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent of the amount bid, as evidence of good faith upon the part of the bidder.

A deposit of $10.00 will be required for each set of plans, which will be refunded on the return of plans in good condition.

The Town reserves the right to reject any and all bids, or waiving all formalities to accept any which may seem to be the best for the Town of South West La Grange.

C. W. COLEMAN, Mayor.
C. L. SMITH, Clerk & Treas.,
Southwest LaGrange, Ga.

G. H. SARGENT,
City Engineer,
LaGrange, Ga.

Bids: April 28.

Sanitary Sewer

Flagstaff, Arizona.

Up to 4 P.M., of the 28th day of April, 1919, sealed bids will be received by the Town Clerk of Flagstaff, Arizona, for the construction and extension of a sanitary sewer system. Funds to the amount of $95,000 are available for the work.

Plans and specifications are on file at the office of the Town Clerk and may be obtained from Olmsted & Gillelen, 1112 Hollingsworth Building, Los Angeles, California, on payment of $1.50; the plans to remain the property of the bidder.

Certified check to the amount of 10% of the bid must accompany each bid. The Town retains the right to reject any and all bids.

ALEX. A. JOHNSTON,
Town Clerk.

Bids: May 15.

Dredging

Mobile, Alabama.

Notice is hereby given that the Board of City Commissioners of Mobile, Alabama, will receive bids up to twelve o'clock noon, Thursday, May 15th, 1919, for dredging a minimum of one million cubic yards (1,000,000) of material at the Arlington Pier, on Mobile Bay. Bids must be accompanied by a certified check for the sum of Five thousand dollars ($5000). The right is reserved by the board to increase the quantity and also to reject any or all bids. Specifications and information in regard to the work can be obtained from the City Engineer.

H. PILLANS,
Commissioner of Docks.

WRIGHT SMITH,
City Engineer.

OFFICIAL PROPOSALS

Bids: May 5.

North Hill Viaduct

FOR

SUMMIT COUNTY,
AKRON, OHIO

Sealed proposals to be filed with L. M. Kauffman, Clerk, will be received by the Board of County Commissioners of Summit County, at Akron, Ohio, up to 9 A.M. o'clock (Central Standard time), May 5, 1919, for furnishing the materials and performing the labor necessary for the construction of the North Hill Viaduct in Akron, Ohio.

The viaduct will be of reinforced concrete with an over-all length of about 2790 ft. consisting of 16 arch spans varying in length from 116 ft. to 191 ft., and of 12 short girder spans. A roadway 52 ft. wide and two sidewalks, each 10 ft. wide are provided. Certain piers will rest on sand and gravel; others on concrete piles.

Payments will be made in cash and monthly estimates will be rendered. All bids shall be accompanied by a check of the bidder, certified to by a solvent bank in the State of Ohio, made payable to Board of County Commissioners, for an amount of five per cent of the bid, to be forfeited as liquidated damages (but not a penalty) by any bidder who is awarded a contract and who fails promptly and properly to execute the contract and bond. Upon the execution of the contract and bond by the successful bidder, said check will be returned to him and the checks of unsuccessful bidders will be returned to them. The contract will be awarded to the lowest responsible and competent bidder, but the Board reserves the right to reject any and all bids and to waive informalities.

Conforming to Ohio General Code, bids will also be received on alternate designs prepared by the bidder, providing certain requirements are complied with.

Plans and specifications are on file in the office of the County Engineer, the County Auditor, Akron, Ohio, and in the office of Harrington, Howard and Ash, Consulting Engineers, Kansas City, Missouri. Copies of the plans and specifications may be secured from the Consulting Engineers by depositing twenty-five dollars. Such plans and specifications are to be returned upon request, at which time refund of fifteen dollars will be made.

Bids: April 23.

Asphalt Road Oil

DEPARTMENT OF PUBLIC IMPROVEMENTS, SUB-DEPARTMENT OF HIGHWAYS ENGINEER

Baltimore, Maryland.

Separate sealed proposals, executed in duplicate and addressed to the Board of Awards, care of the City Register, will be received by him at his office until 12 o'clock noon, Wednesday, April 23, 1919, for furnishing and delivering asphalt road oil.

Specifications and blank proposal sheets will be furnished upon application at this office, City Hall. A certified check of the bidder on a clearing house bank, drawn to the order of the Mayor and City Council of Baltimore, in the amount recited in such specification, must accompany each bid.

The Board of Awards reserves the right to reject any and all bids.

GEORGE F. WIEGHARDT,
Highways Engineer,
Baltimore, Maryland.

OFFICIAL PROPOSALS

Bids: April 22.

Road Improvements

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Salem for the reconstruction of Malaga-Penn Grove Road, 7th Section, in the Borough of Pennsgrove and Township of Upper Penns Neck, in the County of Salem with a Bituminous Dressing (sheet asphalt) upon a Macadam foundation; estimated amount of surface pavement required is 27,804 square yards, of foundation 27,804 square yards; and opened and read in public at the Freeholders Room, Court House, Salem, N. J., on Tuesday, April 22, 1919, at eleven A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Howard B. Keasbey, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at Salem, N. J., and of said Commission at Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawing by the engineer of proper notice and payment of the cost of preparation. Bids must be made on the Standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder on the outside, addressed to I. C. Smashey, Clerk of said Board and must be accompanied by a certified check for not less than $1000, and be delivered at the place and on the hour above named. The Standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

Bids: May 5.

Road Work

Fayetteville, W. Va.

Bids will be received up to May 5th, 1919, at the Office of J. K. McGrath, County Engineer, Fayetteville, West Va., for the grading of 10 miles of County road in Fayette County. This work is steam shovel and team work and will be let in two (2) sections of 5 miles each. Bids will be received on both sections, together or separately. There will be approximately 20,000 Cu.Yds. of excavation on each section. Specifications, bid sheets and all other necessary information can be had by applying to above named engineer. There will be a party on the ground to show bidders over the work May 1st, 1919.

A certified check of $1000.00 made payable to Thoney Pietro and Company, shall be filed with each bid. The right is reserved to reject any or all bids.

THONEY PIETRO & COMPANY
By JAMES CAIN.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 23, 1919, for constructing about 290,000 cu.yd. of earthwork (210,000 cu.yd. hydraulic fill in old borrow pits; and 80,000 cu.yd. levee enlargement) in the Lima Lake Drainage District, Ill. Further information on application.

OFFICIAL PROPOSALS

Bids: April 22.

Applying Bituminous Dressing

Mercer County, New Jersey.

Sealed proposals will be received by the Board of Chosen Freeholders of the County of Mercer, at its regular place of meeting at the Court House, Trenton, N. J., on Tuesday, April 22, 1919, at 2:30 o'clock in the afternoon:

1. For furnishing all labor, material and equipment necessary or incident to the application of a surface dressing of TAR to approximately forty miles of road in the southern section of the said County of Mercer, being that portion of said county lying south of the Pennsylvania Railroad. The estimated quantity of tar required will be approximately 95,960 gallons, and the estimated quantity of covering material will be approximately 3695 tons.

2. For furnishing all labor, material and equipment necessary or incident to the application of a surface dressing of TAR on approximately twenty-four miles of road in the northern section of the said County of Mercer, said northern section being that part of the said County lying north of the Pennsylvania Railroad. The estimated quantity of material required for this section will be 51,030 gallons of tar, and 2005 tons of covering material.

3. For furnishing all labor, material and equipment necessary or incident to the application of a surface dressing of ASPHALTIC OIL on approximately forty-three miles, on roads located chiefly in that part of the said county of Mercer lying north of the Pennsylvania Railroad or adjacent thereto. The estimated quantity of asphaltic oil required will be 121,773 gallons and the estimated quantity of covering material required will be 4195 tons.

Separate proposals will be received for each of the above divisions of work designated as 1, 2 and 3 respectively.

Complete specifications, as to the quality of materials, manner of application, time of performance and other details of the said work, and the manner of making up and submitting proposals, together with blank forms and maps therefor, may be obtained at the office of Harry F. Harris, County Engineer, Court House, Trenton, N. J., upon payment of the sum of one dollar for each set, covering cost of preparation. The conditions of such specifications shall absolutely govern the manner of submitting bids and of performing the work, and references thereto for complete information regarding the same is herewith insisted upon.

Eac hand every bid must be accompanied by cash or a certified check payable to the order of Edgar G. Weart, County Collector, in the sum of five hundred dollars ($500), which deposit is made with the understanding that it shall be retained and kept by the County of Mercer as against the successful bidder, by way of liquidated damages should he fail to execute valid contract and surety bond within seven (7) days from the awarding of the contract.

Each proposal must be accompanied by a proposition for a Surety Company on the form furnished by the Engineer, whereby said surety company agrees to furnish on application a bond as required. No bid will be received or read unless this condition is complied with on the part of the bidder.

The right is reserved to reject any or all bids, or to waive any immaterial defect or informality in any bid, should it be deemed to the interest of the County to do so.

GEORGE R. HUTCHINSON,
Director of Road Repair.

OFFICIAL PROPOSALS

Bids: April 24.

Storm Water Drain

Coatesville, Penn.

Sealed proposals, addressed to the City Clerk of Coatesville, Penn., will be received at the City Hall at Coatesville until 8 o'clock P.M., April 24th, 1919, for the construction of a storm water drain to replace "Gibbon's Run."

This drain will be approximately 5400 lineal feet in length and will vary in size from 87" to 36". The construction will be of brick, segmental tile block or reinforced concrete pipe in part or in whole. There will also be 25 manholes and 80 steam water inlets with the necessary vitrified pipe connections.

Plans and specifications are on file in the office of the City Engineer in Coatesville, Penn.

A set of plans and specifications may be obtained upon application to the undersigned accompanied by a deposit of Ten Dollars ($10.00) which will be refunded upon the return of the plans and specifications in good condition up to and including the date of letting.

Proposals shall be submitted upon blanks provided for this purpose by the undersigned, and shall be accompanied by a certified check for Five per cent. (5%) of the total amount of bid. A satisfactory surety bond in an amount equal to fifty per cent. (50%) of the contract will be required from the successful bidder.

The City Council reserves the right to reject any and all bids and to award the work as a whole or in part.

The Contractor must comply with all the requirements of the Workmen's Compensation Law of the State of Pennsylvania.

CHAS. A. NILES,
City Engineer.
WILLIAM S. G. COOK,
City Clerk.
GEORGE ROMMEL, JR.,
Special Assistant.

Bids: April 24.

Cleaning Out Drainage Canals

Hyde Co., N. C.

Sealed proposals will be received by the board of drainage commissioners of the Mattamuskeet Drainage District of Hyde Co., North Carolina, for the cleaning out of approximately 30 miles of drainage canals containing approximately 850,000 cu. yd. of material, until 2 o'clock p.m., Thursday, April 24th, at the offices of the board of commissioners at New Holland, North Carolina.

Proposals will be received in either of the following forms:

Unit price, Cost plus percentage, and rental per hour of operation.

Each proposal must be accompanied by a certified check or bidder's bond executed by some surety company authorized to do business in the state of North Carolina for $1000 as guarantee that the successful bidder will enter into contract with the board of commissioners.

Bond will be required of the successful bidder in the sum of 50 per cent. of his estimated cost.

Right is reserved to reject any and all bids.

J. S. MANN, chairman.
K. L. PONZER, Vice chairman.
T. B. JONES, commissioner.
K. L. PONZER, engineer.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

OFFICIAL PROPOSALS

Bids: April 25.

Laying Sewer

Ridgefield, Conn.

Sealed proposals will be received by the Sewer Committee of the Burgesses for the Borough of Ridgefield, Conn., on April 25, 1919, at 3 o'clock P.M., at the Town Hall at Ridgefield, Conn., for furnishing materials and laying about 5200 ft. of 8 in. tile sewer, according to plans, profiles and specifications on file with said Sewer Committee, in and about section of said Borough known as Bryon Park, together with 28 man-holes and all appurtenances. A bond of 50% of contract price will be required for the faithful performance of the contract. Cash or certified check for $100 must accompany each proposal. This amount will be returned to the unsuccessful bidders.

Separate bids will be received at same time and place for two detention tanks, dosing chamber, sludge bed and appurtenances as per plans and specifications on file with the Sewer Committee. A bond of 50% of contract price will be required and cash or certified check for $100 must accompany each proposal. Plans, blank forms for proposals and specifications may be obtained from the Borough Clerk at Ridgefield, Conn.

The Borough reserves the right to reject any or all bids.

GEO. E. BENEDICT,
Borough Clerk.

W. J. WOOD, JR.
Engineer,
Westport, Conn.
Dated: April 8, 1919.

Bids: April 30.

Re-Paving and Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed "Proposal for Re-paving and Sewer in South Main Street, from Thornton to Crosier" will be received at the office of the Director, Delaware Bldg., Akron, Ohio, until 12 o'clock noon, Central Standard time, of Wednesday, the 30th day of April, 1919, and at that time and place will be publicly opened and read.

The work includes removal of 6670 sq.yds. of old pavement and concrete base.

Removal of 4500 sq.yds. of pavement only.
Laying 6670 sq.yds. concrete base.
910 lin.ft. of 30" to 36" Trunk Sewer.
1680 lin.ft. 8" to 24" vitrified pipe sewer.
4800 lin.ft. 4" sub-drain.
13 manholes.
21 street inlets.
Laying 11,175 sq.yds. stone block or brick pavement.

Each proposal must be accompanied by certified check in the sum of Five Hundred Dollars ($500.00).

A surety bond in the sum of Fifty (50) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer, or can be obtained upon deposit of Five Dollars ($5.00), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE, Director Public Service.
E. A. ZEISLOFT, Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 24.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received at the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 24, 1919, for the road work on the Lincoln Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, and also in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois. Plans for the sections in Ogle, Lee and Dhiteside counties may be examined also in the office of District No. 2, H. E. Surman, District Engineer, Dixon National Bank, Dixon, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the district engineer in whose district the work is located, plans for the work in the respective districts may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
DuPage	1	18	22,433
DuPage	G	18	12,400
DuPage	2	18	9,660
DuPage	3	18	8,207
Kane	L—15d	18	17,851
Kane	4	18	25,631
Kane	5	18	24,311
Kane-DeKalb	6	18	22,591
DeKalb	7	18	25,083
DeKalb	G	16	14,400
DeKalb	8	16	8,352
DeKalb	18	6	5,337
DeKalb-Ogle	9	16	29,300
Ogle	E—15d	16	8,433
Lee	12	16	14,750
Lee	14	16	34,362
Lee	H—15d	16	14,719
Lee	15	16 & 18	34,330
Whiteside	17	16	24,687
Whiteside	H	16 & 18	10,135

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Sections 8 and 18 will not be let separately from one another, but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the print accompanying proposal forms.

By order of Department of Public Works & Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

OFFICIAL PROPOSALS

Bids: April 23.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., April 23, 1919, for the road work on the Dixie Highway designated by county and section below. All bids must be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois; in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois; and also in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with District Engineer R. L. Bell, plans may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); **bituminous** concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

County	Sec.	Width, Feet	Approximate Length, Feet
Iroquois	1	16	39,730
Iroquois	2	16	22,854
Iroquois	H—15d	16	5,600
Iroquois	4	16	20,999
Iroquois	H—15d	16	5,250
Kankakee	5	16	44,539
Kankakee	K—15d	16	11,161
Kankakee	6	16 & 18	37,757
Kankakee	7	18	35,079

Cement will be furnished on all sections by the Department of Public Works and Buildings or the County.

Sections 4 and H-15d will not be let separately from one another but aside from this, proposal forms will be so arranged that the several sections may be let separately, in one combination, or in such other fixed combinations as the proposal forms show, that bidders may select almost at will the size and location of the job upon which to bid.

The locations of the proposed work are shown on the printe accompanying the proposal forms.

By order of Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Superintendent of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Custom House, Norfolk, Va. Sealed proposals will be received until 12 o'clock noon, April 26, 1919, and then opened, for dredging for widening the channel to Newport News, Va. Further information on application.

OFFICIAL PROPOSALS

Bids: May 2.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY
DEPARTMENT

Harrisburg, Pa

Sealed proposals will be received at the State Capitol until 10 A.M., May 2, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 40,004 linear feet of Reinforced Concrete & Hillside Vitrified Brick Paving, 18 feet wide, situated in Windsor Township, Berks County, and West Brunswick Township, Schuylkill County, on Route No. 141; 5443 Linear feet of Reinforced Concrete Pavement, 18 feet wide, situated in Duncansville Borough, Blair County, on Route No. 53; 16,177 Linear Feet of Vitrified Brick Paving, 18 feet wide, situated in Allegheny Township, Cambria County, on Route Nos. 53 and 276; 32,100 Linear Feet of Bituminous Surface and Hillside Vitrified Brick Pavement, 18 ft. wide, situated in Spring Township, Centre County, on Route No. 27; 21,626 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in W. Goshen & W. Whiteland Townships, Chester County, on Route No. 147; also 2334 Linear Feet of Reinforced Concrete Pavement, from 18′ to 32½′ in width, situated in Kennett Square Borough, Chester County, on Route No. 131; 26,648 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet. wide, situated in Paint and Elk Townships, Clarion County, on Route No. 65; also 1842 Linear Feet of Vitrified Brick Pavement, 16 and 35 feet wide, situated in Clarion Borough, Clarion County, on Route No. 65; 8414 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Walker and Formanagh Townships, Juniata County, on Route No. 31; 10,560 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Union Township, Luzerne County, on Route No. 4; also 22,452 Linear Feet of Bituminous Pavement, 18 feet wide, situated in Salem Township, Luzerne County, on Route No. 4; 26,310 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Charleston and Richmond Townships, Tioga County, on Route No. 21; also 10,717 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Broken Straw Township, Warren County, on Route No. 88. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

L. S. SADLER,
State Highway Commissioner.

TREASURY DEPARTMENT. Supervising Architect's Office, Washington, D. C., March 24, 1919.—Sealed proposals will be received at this office until 3 p.m., April 21, 1919, and then opened, for alterations at the U. S. Post Office and Court House, Erie, Pa., in accordance with the specification and drawings mentioned therein, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 29, 1919, and then opened, for dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor, N. J. Bids for any or all of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Bridge Construction

SOUTH CAROLINA STATE HIGHWAY COMMISSION

Lockhart, S. C.

Notice is hereby given that sealed proposals for the construction of highway improvement in Union and Chester Counties will be received at the office of Lockhart Mills, at Lockhart, South Carolina, until 12 o'clock, M., April 30, 1919, and then publicly opened.

DESCRIPTION OF WORK TO BE DONE:

To construct a steel highway bridge across the Broad River at Lockhart, South Carolina, of approximately seven hundred (700) feet in total length, consisting of two (2) spans of approximately two hundred and fifty (250) feet and tow (2) end spans of approximately one hundred (100) feet, and the necessary concrete piers and abutments therefor, containing approximately eight hundred and eighty-five (885) cubic yards of Class (1:2½:5) concrete and seven hundred and seventy-five (775) pounds of reinforcing steel. Width of roadway, 16 feet. Bidder to submit design of superstructure in compliance with South Carolina Highway Bridge Specifications.

Uniform live load of 80 pounds per square foot for each 100-ft. span and 64 pounds per square foot for each 250-ft. span. Concentrated live load, 15-ton truck as per specifications.

Detailed plans of the work may be seen for examination at the office of Lockhart Mills, at Lockhart, South Carolina, and at the offices of the State Highway Commission, Columbia, South Carolina. Bids may be submitted separately on substructure and on superstructure.

A certified check for one thousand dollars ($1000), made payable to order of the Chairman of the Commission to erect a bridge at or near Lockhart Mills, S. C., must accompany each proposal.

The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes and marked, "Bids on the Construction of the Lockhart bridge, between Union and Chester Counties."

Proposals may be sent by mail, and when sent by mail shall be inclosed in an additional sealed envelope properly marked as indicated above.

All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the State Highway Commission and will not be returned to the bidders.

J. ROY PENNELL,
State Highway Engineer.

Bids: April 28.

Excavating Ditch

Sterling, Illinois.

Drainage Commissioners of Drainage District No. 1, Hahnaman Township, Whiteside County, Illinois, will receive bids, at office of Carl E. Sheldon, Sterling, Illinois, up to 2:00 p.m., April 28, 1919, for deepening, widening, etc., of ditch. Excavation required, 101,211 cu.yds. Length of ditch, 37,765 ft. Estimated cost, $26,666.42. Six highway bridges to be removed and replaced. Specifications, office of Carl E. Sheldon. Addition information, E. O. Hills, Engineer, Fulton, Illinois.

OFFICIAL PROPOSALS

Bids: May 8.

Construction, Sanitary Work, Etc.

Newark, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Cottage for Inmates, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., will be received by Mrs. Sarah F. S. Armstrong, President, Board of Trustees, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., until 12 o'clock noon, Thursday, May 8, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3130, 3189, 3190, 3191. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Custodial Asylum, Newark, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: April 11, 1919.

Bids: May 1.

Poughkeepsie Pre-Filter Building Construction

Poughkeepsie, N. Y.

Sealed proposals endorsed "Proposals for Pre-Filter Construction at Poughkeepsie Water Purification Plant" will be received by the Board of Public Works at their office in Eastman Park Mansion until four P.M. May 1st.

The work consists in building a reinforced concrete structure and placing all the pipes, valves ,strainers, etc., which will be furnished by the Board of Public Works.

Plans and specifications may be seen at the office of the Board of Public Works; alsod at the office of Hazen, Whipple & Fuller, Consulting Engineers, 42nd. Street Building, New York City, or may be obtained by depositing thirty dollars. The deposit will be returned only upon the return of the plans in good condition within two weeks after the letting.

No proposal will be entertained unless made on the blanks furnished.

A certified check for nine hundred dollars must accompany the proposal.

The Board reserves the right to reject any or all proposals.

BOARD OF PUBLIC WORKS.
E. W. SYLVESTER,
Supt.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

OFFICIAL PROPOSALS

Bids: April 25.

Highway Works

Hartford, Conn.

SEALED PROPOSALS will be received by the State Highway Commissioner, Fourth Floor, West End, State Capitol, Hartford, Connecticut, until 2 P.M., Friday, April 25, 1919, for the following sections of State work, in accordance with plans and specifications on file in the office of the State Highway Commissioner and at the following places:

TOWN OF HADDAM: About 5200 ft. trap rock macadam road on the Killingworth Road. Plans and specifications at the office of C. F. Taylor, Division Engineer, 151 Main Street, Middletown, Conn.

TOWN OF MANCHESTER: About 3270 ft. of bituminous macadam on Deming Street. Plans and specifications at the office of S. M. Benton, Town Clerk, Manchester, Conn.

TOWN OF MERIDEN: About 4238 ft. of bituminous macadam on the Westfield Road. Plans and specifications at the Selectmen's office in Meriden, Conn.

TOWNS OF NEW BRITAIN, NEWINGTON & FARMINGTON: About 6979 ft. of concrete, topeka, warrenite or asphalt on Stanley Quarter Road. No plans. Specifications at the office of R. W. Stevens, 408 Main Street, Hartford, Conn.

TOWN OF OLD LYME: About 3650 ft. of gravel road on the Black Hall-Niantic Road. Plans and specifications at the store of James F. Bugbee, Old Lyme, Conn.

TOWNS OF SALISBURY AND SHARON: About 34,518 ft. of 10 in. gravel or gravel over slag base on the Lakeville-Sharon Road. Plans and speicfications at the office of R. S. Hulbert, Division Engineer, Station A, Winsted, Conn.

TOWNS OF THOMASTON AND WATERBURY: About 7258 ft. of concrete or topeka over concrete base on Thomaston Avenue. No plans. Specifications at the office of E. C. Welden, Chamber of Commerce Bldg., New Haven, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State highway commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, April 9, 1919.

C. J. BENNETT,
State Highway Commissioner.
Fourth Floor, West End, Capitol,
Hartford, Conn.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

Bids: April 24.

Asphalts and Tars

STATE HIGHWAY DEPARTMENT OF OHIO

Columbus, Ohio.

Sealed bids will be received until 2 P.M., April 24, 1919, at the office of the State Highway Commissioner, Columbus, Ohio, for furnishing in tank cars for shopment to various points in Ohio about 1,100,000 gallons of tars and asphalts.

Specifications and bid forms will be furnished on application.

CLINTON COWEN,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: April 30.

Road Construction

Monmouth, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Matawan-Freehold Road (second section), in the townships of Marlboro and Freehold, in the County of Monmouth, with a reinforced concrete surface, estimated amount of surface pavement required is 36,248 sq.yd., and opened and read in public at Freeholder's office, Court House, Freehold, N. J., on Wednesday, April 30, 1919, at eleven A. M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by George D. Cooper, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer, 60 Broad Street, Red Bank, New Jersey, and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and the name of the road on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth, and must be accompanied by a surety company certificate stating that the said surety company will provide the bidder with the required bond, and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders of the County of Monmouth.

WILLIAM M. BERGEN,
Director.

Attest:
C. E. Close, Clerk.
Dated: April 9, 1919.

Bids: May 6.

Constructing Basin for Water System

Ely, Minn.

Notice is hereby given that the City Council of the City of Ely, Minnesota, will receive sealed proposals for the construction of a sedimentation basin for the water system of the City of Ely.

Separate bids to be made on the construction of the sedimentation basin and the installation and furnishing raw water piping and drainage system.

Plans and specifications now on file in the office of the City Clerk of the City of Ely, Minnesota.

Specified time for the completion of the work to be stated.

A certified check or bond to the amount of 10 per cent of the contract price to accompany each bid.

Bids to be opened May 6, 1919, at 8 o'clock P.M.

Address proposals to the undersigned and marked "Proposal for Construction of Sedimentation Basin," and Proposal for Furnishing and Installation of Raw Water Piping and Drainage System."

The City Council of the City of Ely, Minn., reserves the right to reject any or all bids.

By order of the City Council.

I. WISTED, JR.,
City Clerk,
City of Ely, Minnesota.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 5, Section 1B (Morris Plains to Morristown), concrete surface. Estimated 11,500 sq.yd., Morris County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 30, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: April 28.

Paving

Elmira, N. Y.

Sealed proposals for grading, curbing and paving the below named streets will be received by the undersigned at his office in the City Hall until 11:30 o'clock A.M., April 28, 1919:

Woodlawn Ave., 2800 sq.yd.
East & West First Street, 2400 sq.yd.
Walnut Street, 14,900 sq.yd.

Plans and specifications are on file in the City Engineer's Office, City Hall, where also may be obtained the "proposal sheets" which must be used.

Separate certified checks are required as follows:

Woodlawn Ave., $1100; E. and W. First Sts., $900; Walnut St., $6200 payable to the order of the Mayor of Elmira, N. Y., and must accompany the bids. They will be returned to the bidders upon execution of the contracts.

The envelopes must be endorsed "Proposals for Pavements."

The Board of Public Works reserves the right to reject any or all bids.

LOUIS C. ANDREWS,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 6.

Road Improvements

STATE HIGHWAY COMMISSION,
DURHAM COUNTY, NORTH CAROLINA

Sealed bids for Road Improvements on the North Carolina Central Highway, in Durham County, North Carolina, will be received by the Board of County Commissioners at the County Court, House in Durham, North Carolina, until 3 o'clock P.M., on the sixth (6th) day of May, 1919, opened and read publicly.

The work will consist approximately as follows:

78,900	Sq.yd. of brick, asphalt, cement, concrete, bituminous concrete, or other approved pavement. Combination cement concrete header curbing and base course required except with cement concrete construction.
4,000	Cu.yd. old macadam in present surface removed and replaced along edges of new pavement.
56.92	Cu.yd. Class "A" Concrete Culverts.
4774.0	Lb. reinforcing steel in Concrete Culverts.
75.66	Cu.yd. Class "B" Concrete Pipe Headwalls.
612.5	Lin.ft. 15" Standard Vitrified Pipe.
152.5	Lin.ft. 18" Standard Vitrified Pipe.
152.5	Lin.ft. 24" Standard Vitrified Pipe.

No bid will be considered unless accompanied by cash, certified check, as specified in "Instructions to Bidders" for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the Office of the State Highway Commission, at Raleigh, North Carolina, upon the deposit of $5.00.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the State, County or Township.

By order of the Board of County Commissioners of Durham County.

This the 10th day of April, 1919.

A. L. CARLTON,
Chairman of Board of County
Commissioners of Durham County.

M. G. MARKHAM,
Clerk or Secretary.

Bids: May 8.

Sewer Construction

Platte, S. D.

Sealed proposals for the construction of a sewer system and sewage disposal plant will be received by the City Auditor in his office, in Platte, S. D., up to 8 P.M., May 8, 1919.

All bids must be on forms furnished by the City Auditor, or City Engineer, W. L. Bruce, Yankton, S.D., and shall be in accordance with the plans and specifications on file in the office of City Auditor and City Engineer, from whom copies may be obtained upon deposit of fifteen dollars, which amount will be returned upon receipt of plans and specifications in good order, within five days after date of receiving bids.

Each proposal shall be accompanied by a bond for 50% of bid.

C. F. SLATE,
City Auditor.

OFFICIAL PROPOSALS

Bids: May 6.

Concrete Bridge Construction

Pottsville, Pa.

Sealed proposals will be received by the undersigned, the Controller of Schuylkill county, at his office in Pottsville, Pa., until 11 o'clock A.M., Tuesday, May 6, 1919, for the construction of a concrete bridge over Swatara creek, in the borough of Pinegrove, Schuylkill County, Pa.

The proposed bridge is 78 ft. clear span, and 36 ft. over all width.

Bids must be made upon proposal blank attached to specifications, and must be accompanied by certified check in a sum equal to 10 per cent. of the bid, made payable to the County of Schuylkill, Pa.

Plans and specifications may be seen at the County Commissioners office, and may be had by prospective bidders on the payment of $5.00.

The right is reserved to reject any or all bids.

Mark envelopes plainly "Proposals for Concrete Bridge."

By direction of the County Commissioners.

J. E. KANTNER,
County Controller.

April 10, 1919.

Bids: May 5.

Paving, Bridging, Grading, Etc.

Dallas, Tex.

Notice is hereby given that sealed proposals will be received by Chas. E. Gross, County Auditor for Dallas County at Dallas, Tex., up to ten o'clock A.M., Monday, May 5, 1919, for the construction of a concrete pavement, including concrete bridging, grading, etc., on the Dallas-Ft. Worth Road, between the City of Dallas and the Dallas-Tarrant County line.

Approximate quantities are as follows:

Concrete pavement	106,000 sq.yd.
Concrete bridging	1,300 cu.yd.
Steel reinforcement	210,000 pounds
Grading	70,000 cu.yd.

A certified check in the sum of $10,000 made payable to Cecil L. Simpson, County Judge, shall accompany each proposal. Dallas County reserves the right to reject any or all bids. Plans on file with the State Highway Department at Austin, Texas, also with J. F. Witt, County Engineer for Dallas County at Dallas, Texas.

CHAS. E. GROSS,
County Auditor.

Bids: April 28.

Road Repairing

Scranton, Pa.

Sealed proposals will be received in the office of the County Controller, Lackawanna County, Scranton, Pennsylvania, until 10:30 a.m., Monday, April 28th, 1919, for the repair of the County Road, running from the Luzerne County Line, through the Boroughs of Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn, Mayfield, the Townships of Carbondale and Fell, and the Borough of Vandling, to the boundary line of the County of Susquehanna.

Specifications, etc., are on file in the office of the County Commissioners of Lackawanna County, Court House, Scranton, Pa., and may be seen or had by bidders upon application.

Certified check for five (5%) per cent. of the amount of bid, drawn to the order of the County of Lackawanna, must be furnished wit heach proposal.

The right is reserved to reject any or all bids.

CHAS. P. SAVAGE,
County Controller.
Attest:
RALPH COLLINS,
Deputy County Controller.

OFFICIAL PROPOSALS

Bids: April 27.

Paving

Elmira Height, N. Y.

Sealed proposals will be received by Norvan Shook Clerk of the Village of Elmira Heights, N. Y., for the construction approximately of

10,500	sq.yd. Vitrified shale brick pitch filled pavement.
3,075	lin.ft. stright concrete curb with protection bar.
380	lin.ft. curved concrete curb with protection bar.
700	lin.ft. 6" medina headers.

on 14th St. in said Vallage until 10 A.M. on the 27th day of April, 1919, at which time they will be publicly opened and read in the Office of the Board of Trustees, Village Hall, Elmira Heights, N. Y.

Plans and Specifications for the proposed work will be on exhibition at the said office after April 16th, 1919.

A certified check of ($2000.00) Two Thousand Dollars made payable to the Village Treasurer of Elmira Heights must accompany all bids.

The Village Board reserves the right to reject any or all bids.

Village Clerk.
NORVAN SHOOK,
SILAS M. HAIGHT,
Village Engineer.

Bids: April 24.

Paving

Jackson, Mich.

Sealed bids will be received by the City Manager of the City of Jackson, Michigan, till 10 o'clock A.M., Thursday, April 24, 1919, for paving several streets. The total estimated quantities are as follows:

21,775	Sq.yd. brick pavement.
40,000	Sq.yd. asphaltic concrete pavement.
46,300	Lin.ft. combined curb and gutter.
16,000	Cu.yd. of excavation.

A certified check for 5% of the amount of the bid, payable to the City Clerk, must be inclosed with each bid, same to be forfeited to the City of Jackson in case the successful bidder refuses or neglects to enter into contract. Separate bids will be received on each street. Plans, specifications ,and bidding blanks are on file in the office of the City Engineer.

The right is reserved to reject any or all bids.

A. W. D. HALL,
City Manager.
W. B. HODGES,
City Engineer.
Dated: Jackson, Mich., April 8, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Buildign, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

U. S. ENGINEER OFFICE, Room 601, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., April 28, 1919, and then opened, for dredging in Staten Island Sound, N. Y. and N. J. Further information on application.

OFFICIAL PROPOSALS

Bids: April 23.

Portions of Main Dam of the Scituate Reservoir, and Earth Roads

CITY OF PROVIDENCE,
WATER SUPPLY BOARD,

Providence, R. I.

Sealed proposals for building, during 1919, portions of the Main Dam of the Scituate Reservoir (contract 11), and for building an Earth Road about 3.5 miles in length (contract 10), both in the Town of Scituate, R. I., about 10 miles westerly from the City of Providence, will be received at the office of the Water Supply Board, City Hall, until 2:30 o'clock P.M., on Wednesday, April 23, 1919, at which time and place they will be publicly opened and read.

The Engineer's estimate in cubic yards of some of the main items are as follows: Contract 11—Earth excavation and borrow, 132,000; rock excavation, 3500; concrete masonry, 1500. Contract 10—Earth excavation and borrow, 24,000; rock excavation, 800; concrete masonry, 400.

Plans and pamphlets containing information for bidders, form of proposal, contract and bond and the specifications may be obtained from the Secretary of the Board, City Hall, or at the office of the Chief Engineer, 661 Westminster St.

By order of the Water Supply Board.
B. THOMAS POTTER, Chairman.
SAMUEL N. GRAMMONT, Secretary,
FRANK E. WINSOR, Chief Engineer.

Bids: May 1.

Pavement Construction

DEPARTMENT OF PUBLIC WORKS

Augusta, Georgia.

Sealed proposals will be received by the Streets and Drains Committee of the City Council of Augusta, Ga., at the City Hall, Augusta, Ga., until 12 o'clock noon, May 1, 1919, and at that time and place publicly opened, for the construction of approximately 55,000 sq.yd. pavement on Walton Way from 15th Street to Monte Sano Avenue.

Bids will be received on:

Asphaltic concrete, 4-in. concrete foundation.
Sheet asphalt, 4-in. concrete foundation.
Brick, monolithic construction.
6-in. concrete.

All bids must be accompanied by a certified check in favor of the City Council of Augusta, in the sum of 5% of the amount of the contract bid upon, to guarantee execution of contract if awarded.

The City Council reserves the right to reject any or all bids. Address bids to "Wm. Lyon Martin, Clerk of Council, Augusta, Ga.," marking on envelope, "Proposals Walton Way Pavement."

Plans and specifications may be had after April 16, 1919, by application to the undersigned.

W. H. WISE,
Acting City Engineer and Commissioner
Public Works.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: April 29.

Highway Works

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building six sections of the State Highway, as follows:

ALLEGANY COUNTY,
Contract A-14:

One section of State Highway from Corrigansville to the Maryland-Pennsylvania State Line at Ellerslie, for a distance of 2.33 miles. Concrete.

CAROLINE COUNTY,
Contract Co-19:

One section of State Highway through Greensboro, for a distance of 0.65 miles. Concrete.

GARRETT COUNTY.
Contract G-13:

One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-16:

One section of Defense Highway from Bladensburg toward Lanham, for a distance of 1.63 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-17:

One section of State Highway from Largo to Western Branch on Halls Station Road, for a distance of 1.67 miles. Concrete.

WICOMICO COUNTY,
Contract Wi-13:

One section of State Highway from the end of Quantico State Aid Road toward Catch Penny, for a distance of 1.50 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building. Baltimore, Maryland, until 12 M., on the 29th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 11th day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

OFFICE OF THE COMMISSIONERS, D. C., March 28, 1919. Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on April 21, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners.

PROPOSALS FOR MARINE RAILWAY. U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

OFFICIAL PROPOSALS

Bids: May 19.

Road Improvements

Tulsa, Oklahoma.

Notice is hereby given that on the 19th day of May, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider proposals for the grading, paving and otherwise improving the following Tulsa County Roads:

MILES......6..........of SECTION "L"
MILES..1 to 5..inclusive of SECTION "M"
MILES..3 to 5..inclusive of SECTION "I"
MILES..1 to 7..inclusive of SECTION "G"
Part of Mile 8 of Section "E," from East End of Mile 2, Section "I," North 1.3 Miles, Thence East 0.35 Miles to the town of Dawson.

Being a total of approximately 18 miles. Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before two (2) o'clock P.M. of the date above set out. Proposals to be accompanied with a certified check in an amount equal to approximately ten (10%) per cent. of the sum of the bid, drawn on a Bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 7th day of April, 1919.

BOARD OF COMMISSIONERS OF
TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: April 30.

Laboratory Building, Etc.

Albany, N. Y.

Sealed proposals for Gasoline Tank and Pump, Laboratory Building, Division of Laboratories, State Department of Health, Albany, N. Y., will be received by Dr. H. M. Biggs, Commissioner of Health, State Department of Health, Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, April 30, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5% of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3213. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York Office of the Department of Architecture, 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: April 10, 1919.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

OFFICIAL PROPOSALS

Bids: May 5.

Earth Fill Dam and Reservoir

GIRARD WATER COMPANY
POTTSVILLE, PA.
COST PLUS FEE CONTRACT

Pottsville, Pa.

Sealed proposals addressed to James Archbald, General Manager, Girard Water Company, Pottsville, Pa., will be received until 12 o'clock noon, May 5, 1919, for furnishing all materials, equipment and labor, and constructing an

EARTH FILL DAM OF ABOUT
100,000 CUBIC YARDS,

with concrete gate tower, bridge, spillway, and cut-off wall on Whiskey Mill Creek, Schuylkill County, Pa.

Plans, specifications and proposal form will be sent to prospective bidders upon receipt of twenty dollars which will be refunded upon return of the plans and specifications in good condition.

A certified check for $5000 must accompany each bid.

GIRARD WATER COMPANY,
JAMES ARCHBALD, Manager,
Pottsville, Pa.
GANNETT, SEELYE & FLEMING,
Engineers,
Harrisburg and Erie, Pa.

Bids: April 30.

Drainage

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 1:30 P.M., on April 30, 1919, at which time they will be publicly opened, for the work of improvement of the Cottonwood River and its tributaries, in the Cottonwood Valley Drainage District.

Approximate estimate of work to be done:

New channel excavation	968,000 cu.yd.
Excavation from present channels	160,000 cu.yd.
Levee embankment	130,000 cu.yd.
Removal of obstruction other than earth from present channels	56,000 lin.ft.

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division covered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Bldg., Kansas City, Mo.

The Engineer will be on the ground after April 28, for the purpose of furnishing information to bidders.

COTTONWOOD VALLEY DRAINAGE DISTRICT,
BY F. R. WILLIAMS, Secretary.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., at 2 o'clock P.M., May 15, 1919, for furnishing and placing rip rap stone at light stations in the Chesapeake Bay and Potomac River. Information upon application to the above office.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

Put Public Buying on an Efficiency Basis

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with a circulation of over 32,000 a week, reaches almost every worthwhile contractor, manufacturer and dealer interested in public contracts.

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This will put your public buying on an efficiency basis. It will make the tax payers' money go farther and will give you a reputation for a business administration. Local bidders always figure closer when they find that the letting of a contract is being advertised in

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Engineering News-Record

0052

OFFICIAL PROPOSALS

Bids: May 7.

Duboistown Bridge

Williamsport, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River at the foot of Second Street in the Borough of Montgomery, Pa., will be received by the Board of Commissioners of Lycoming County at their office in Williamsport, Pa., until 10 o'clock a.m. of May 7, 1919, at which they will be publicly opened and read.

The bridge as contemplated will be about one thousand (1000) feet long and will consist of nine (9) open spandrel arches; three of the arches will be of 101 feet span and the remainder will be 93 feet.

Prospective bidders may secure copies of the plans and specifications, including form of proposal, by making a deposit of Twenty-five Dollars ($25), which sum will be refunded upon return of plans and specifications in good order.

A certified check for the sum of Five Thousand Dollars ($5000) payable to H. D. Achenbach, County Treasurer, and subject to the usual rules of forfeiture, must accompany each proposal, both of which must be enclosed in a sealed envelope and marked "Proposal for the construction of the Montgomery Bridge," and must be delivered to L. O. Bower, Chief Clerk, Commissioners' Office, Williamsport, Pa.

The right to reject any or all bids or to accept any bid they may deem to be to the best interests of the County is hereby reserved.

CHAS. W. MYERS,
JOHN G. DURRWACHTER,
JOS. H. NICELY,
County Commissioners.

Attest:
L. O. BOWER, Chief Clerk.
M. C. KRAUSE, Engineer,
335 Pine St., Williamsport, Pa.

Bids: May 1.

Boardwalk Decking

Atlantic City, N. J.

Sealed bids will be received by Atlantic City, N. J., until May 1, 1919, for 649,000 feet of Boardwalk decking, Long Leaf Yellow Pine, Douglas Fir, Port Orford Cedar or Sitka Spruce.

Also 397,300 feet Yellow Pine creosoted.

For full particulars and blanks address J. W. Hackeny, City Engineer.

CHARLES D. WHITE,
Director.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: May 7.

Concrete Roof for Reservoir, Water Supply, Road Improvement, Concrete Coal Bin and Conveyor, Sewage Treatment Plant Extensions

Harrisburg, Pa.

Sealed proposals on contracts for the above work for the State Sanatorium, near Mont Alto, Franklin County, Pa., will be received by Edward Martin, State Health Commissioner, Harrisburg, Pa., until 2 P.M., Wednesday, May 7, 1919.

Concrete roof for reservoir, Cont. No. 30, includes replacing existing wood roof on 60 ft. diam. concrete reservoir, with roof of I-beams, expanded metal and concrete. Extensions to water supply system, Cont. No. 31, include approx. 5000 ft. 8 in. c.i. water pipe, 5000 ft. w.i. and c.i. water pipe varying from 2 in. to 6 in. diam., valves, fire hydrants, etc. Construction and resurfacing macadam roads, Cont. No. 32, includes approx. 15,000 ft. water-bound macadam roads. Elevated concrete coal bin and coal handling machinery, Cont. No. 33, includes reinforced concrete elevated coal bin, 300 tons capacity, with necessary coal handling machinery. Extensions to sewage treatment plant, Cont. No. 34, includes approx. 60 cu.yd. concrete, 1 ton steel reinforcement, 1000 cu.yd. excavation, 350 cu.yd. broken stone filter material, 50 cu.yd. rubble masonry, piping, valves, etc.

Plans and specifications can be seen at offices of Dept. of Health, Harrisburg, at 1900 Race St., Phila., Pa., and sets may be obtained Wednesday, April 23, at the office of the Engineering Div., State Health Dept., Keystone Bldg., Harrisburg, upon deposit of $25 for each contract set. Deposits will be returned upon receipt of sets in good condition. Sets will be issued to general contractors only.

Each proposal must be accompanied by certified check for $500. The successful contractors must file a surety bond for fifty per cent. of estimated amount of each contract. Contracts will be awarded separately. The right is reserved to reject any or all bids.

EDWARD MARTIN,
Commissioner of Health.

Bids: May 7.

Montgomery Bridge

Williamsport, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River between the foot of Arch Street and West Williamsport and the foot of what will be High Street in the Borough of DuBoistown, Pa., will be received by the Board of Commissioners of Lycoming County at their office in Williamsport, Pa., until 10 o'clock a.m. of May 7, 1919, at which time they will be publicly opened and read.

OFFICIAL PROPOSALS

The bridge as contemplated will be about 1500 feet long and will consist of thirteen (13) open spandrel arches of ninety-eight (98) feet clear span.

Prospective bidders may secure copies of the plans and specifications including form of proposal by making a deposit of Twenty-five ($25) Dollars, which sum will be refunded upon return of plans and specifications in good order.

A certified check for the sum of Five Thousand Dollars ($5000) payable to H. D. Achenbach, County Treasurer, and subject to the usual rules of forfeiture, must accompany each proposal, both of which must be enclosed in a sealed envelope and marked "Proposal for the construction of the DuBoistown Bridge," and must be delivered to L. O. Bower, Chief Clerk, Commissioners' Office, Williamsport, Pa.

The right to reject any and all bids or to accept any bid they may deem to be to the best interests of the County is hereby reserved.

CHAS. W. MYERS,
JOHN G. DURRWACHTER,
JOS. H. NICELY,
County Commissioners.

Attest:
L. O. BOWER, Chief Clerk.
M. C. KRAUSE, Engineer,
335 Pine St., Williamsport, Pa.

Bids: May 5.

Sewage Disposal Works

Macon, Missouri.

Sealed bids addressed to the "Honorable Mayor and Council," of the City of Macon, Mo., and endorsed "Proposal for Sewage Disposal Works," will be received until 8 P.M., May 5, 1919, at which time they will be publicly opened and read.

Certified check for $700 on a Macon (Mo.) bank, payable to the Treasurer of the City of Macon, Mo.

The work consists of furnishing labor and material, and constructing an Imhoff tank, sludge bed, storm overflow, approximately 790 lin.ft. of 18-in. sewer, and of straightening creek channel.

The City reserves the right to reject any or all bids. 85% monthly estimates in cash.

Sets of plans and specifications may be obtained from the City Clerk's office upon a deposit of $5, said deposit to be returned upon the return of the plans and specifications.

W. H. MARTIN, City Clerk.
Macon, Mo.
FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg., St. Louis, Mo.

Bids: May 10.

Road Grading

Buckhannon, W. Va.

Sealed proposals will be received at the office of the County Clerk, Buckhannon, W. Va., until 12 o'clock non on Saturday, May 10, 1919, for grading 1.5 miles of the Beverly Pike adjacent to the Town of Buckhannon. Excavation, 6000 cu.yd., 1% rock; pipe culverts, 18; tile drain, 400 to 800 lin.ft.

Plans and specifications are on file with the State Road Commission, Charleston, W. Va., and with the undersigned at Buckhannon, W. Va. Certified check for $200.00 will be required, and the right is reserved to reject any and all bids.

W. C. WEST,
County Road Engineer.

—about
CONTRACT BONDS
Lots of work this spring. You will want your Contract Bonds quickly. Swart will handle your application promptly and efficiently.
—and, best of all, will help to establish *your* prestige with the underwriters.
Swart Service—It Really Serves.
HARMON V. SWART
19 Liberty Street, New York.

BIDS WANTED
30000 yd. Traction Shovel Work, mostly overcasting.
Or Will Rent Shovel
EMPIRE ENGINEERING CO.
Buffalo, N. Y.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 29.

Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, New York.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, April 29th, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 44-P.

For paving parts of the terminal sites at Mott Haven, Greenpoint and Gowanus Bay.

Contract plans, sheets 1 to 5, inclusive.

—2—

TERMINAL CONTRACT NO. 77

For dredging at the Barge canal terminals at Piers 5 and 6, East river, at Greenpoint, and at Long Island City, New York.

Contract plans, sheets 1 to 4, inclusive.

—3—

TERMINAL CONTRACT NO. 218

For constructing a Barge canal terminal freight-shed on Pier 93, West 53rd Street, North River, New York City.

Contract plans, sheets 1 to 7, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Boston, Mass.—Sealed proposals will be received here until 12 M., May 3, 1919, and then opened, for dredging at Hog Island, Boston, Harbor, Mass. Further information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 5, Section 1B (Morris Plains to Morristown), concrete surface. Estimated 11,500 sq.yd., Morris County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad St. Bank Bldg., Trenton, N. J., on Wednesday, April 30, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 15.

Dredging

Mobile, Alabama.

Notice is hereby given that the Board of City Commissioners of Mobile, Alabama, will receive bids up to twelve o'clock noon, Thursday, May 15th, 1919, for dredging a minimum of one million cubic yards (1,000,000) of material at the Arlington Pier, on Mobile Bay. Bids must be accompanied by a certified check for the sum of Five thousand dollars ($5000). The right is reserved by the board to increase the quantity and also to reject any or all bids. Specifications and information in regard to the work can be obtained from the City Engineer.

H. PILLANS,
Commissioner of Docks.

WRIGHT SMITH,
City Engineer.

OFFICIAL PROPOSALS

Bids: May 14.

Highway Work

LITTLE ROCK AND HOT SPRINGS HIGHWAY

CHANGE OF DATE
PREVIOUSLY ADVERTISED
BIDS TO CLOSE APRIL 17

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Arkansas, until 2 P.M., May the 14th, 1919, when they will be publicly opened and read.

The work contemplated under the contract is the building of a highway about 55 miles in length, from Little Rock to Hot Springs, Arkansas, and the surfacing of same with concrete or asphalt including culverts and bridges.

The plans contemplate a 30 foot roadbed, 18 feet paved way, and concrete culverts and bridges, except for the small culverts which will be of vitrified tile.

The work has been divided into tow 16 mile sections and one 21 mile section. Bids are invited on each section and as a whole.

Bids will be compared on a basis of the engineers estimates as follows:

Clearing and grubbing	74	acres
Earth work	492,000	Cu. Yds.
Loose rock	110,000	"
Solid rock	14,000	"
12" culverts	905	Ft.
18" culverts	70	"
24" culverts	2,310	"
30" culverts	1,015	"
Plain concrete in headwalls.	392	Cu. Yds.
Reinforced concrete in culverts and bridges	1,994	"
Fences to be moved	4,900	Rods
Paving	746,900	Sq. Yds.
As an alternate for cement base		
Gravel or macadam base haul 0-1 mile	78,150	Cu. Yds.
Gravel or macadam base haul 1-2 mile	45,885	"
Gravel or macadam base haul 2-3 mile	25,015	"
Gravel or macadam base haul 3-4 mile	29,330	"
Gravel or macadam base haul 4-5 mile	10,745	"

Plans and specifications are on file at the office of the County Clerk in the Court House in Hot Springs, Benton and Little Rock and may be seen there.

Blue prints of alignment and grade and bridges comprising 53 sheets may be secured from the engineers for $8.00. Specifications may be secured from the engineers free of cost.

The right is reserved to reject any or all bids.

Board of Commissioners,
Little Rock—Hot Springs Highway.
W. S. SORRELS, Pres.—Hot Springs.
E. O. BAGLEY, Secty.—Little Rock.
GEO. F. BUZBEE.—Benton.
LUND AND HILL, Engrs.
Little Rock, Arkansas.

PROPOSALS FOR DREDGING.—U. S. **Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.**

UNITED STATES ENGINEER OFFICE, **Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.**

OFFICIAL PROPOSALS

Bids: May 6.

Concrete Bridge Construction

Pottsville, Pa.

Sealed proposals will be received by the undersigned, the Controller of Schuylkill county, at his office in Pottsville, Pa., until 11 o'clock A.M., Tuesday, May 6, 1919, for the construction of a concrete bridge over Swatara creek, in the borough of Pinegrove, Schuylkill County, Pa.

The proposed bridge is 78 ft. clear span, and 36 ft. over all width.

Bids must be made upon proposal blank attached to specifications, and must be accompanied by certified check in a sum equal to 10 per cent. of the bid, made payable to the County of Schuylkill, Pa.

Plans and specifications may be seen at the County Commissioners office, and may be had by prospective bidders on the payment of $5.00.

The right is reserved to reject any or all bids.

Mark envelopes plainly "Proposals for Concrete Bridge."

By direction of the County Commissioners.

J. E. KANTNER,
County Controller.

April 10, 1919.

Bids: May 12.

Heating, Plumbing, Etc.

Erie, Penn.

Sealed proposals will be received by the Board of Education, Erie, Penn., on May 12, for the general work, heating, plumbing, electric work, clocks, bells and telephones and vacuum cleaning system, for new East High School building to be erected at Erie, Penn., from plans of Wm. B. Ittner, architect, St. Louis, Mo. Can secure plans and specifications for figuring this work from Mr. R. S. Scobell, business manager, Board of School Directors, Erie, Penn. Deposit check for fifty dollars required to guarantee return of plans and specifications.

Bids: May 6.

Constructing Basin for Water System

Ely, Minn.

Notice is hereby given that the City Council of the City of Ely, Minnesota, will receive sealed proposals for the construction of a sedimentation basin for the water system of the City of Ely.

Separate bids to be made on the construction of the sedimentation basin and the installation and furnishing raw water piping and drainage system.

Plans and specifications now on file in the office of the City Clerk of the City of Ely, Minnesota.

Specified time for the completion of the work to be stated.

A certified check or bond to the amount of 10 per cent of the contract price to accompany each bid.

Bids to be opened May 6, 1919, at 8 o'clock P.M.

Address proposals to the undersigned and marked "Proposal for Construction of Sedimentation Basin," and Proposal for Furnishing and Installation of Raw Water Piping and Drainage System."

The City Council of the City of Ely, Minn., reserves the right to reject any or all bids.

By order of the City Council.

I. WISTED, JR.,
City Clerk,
City of Ely, Minnesota.

OFFICIAL PROPOSALS

Bids: April 29.

Highway Works

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building six sections of the State Highway, as follows:

ALLEGANY COUNTY,
Contract A-14:

One section of State Highway from Corrigansville to the Maryland-Pennsylvania State Line at Ellerslie, for a distance of 2.33 miles. Concrete.

CAROLINE COUNTY,
Contract Co-19:

One section of State Highway through Greensboro, for a distance of 0.65 miles. Concrete.

GARRETT COUNTY.
Contract G-13:

One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-16:

One section of Defense Highway from Bladensburg toward Lanham, for a distance of 1.63 miles. Concrete.

PRINCE GEORGES CO.,
Contract P-17:

One section of State Highway from Largo to Western Branch on Halls Station Road, for a distance of 1.67 miles. Concrete.

WICOMICO COUNTY,
Contract Wi-13:

One section of State Highway from the end of Quantico State Aid Road toward Catch Penny, for a distance of 1.50 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 29th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 11th day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: April 28.

Excavating Ditch

Sterling, Illinois.

Drainage Commissioners of Drainage District No. 1, Hahnaman Township, Whiteside County, Illinois, will receive bids, at office of Carl E. Sheldon, Sterling, Illinois, up to 2:00 p.m., April 28, 1919, for deepening, widening, etc., of ditch. Excavation required, 101,211 cu.yds. Length of ditch, 37,765 ft. Estimated cost, $26,666.42. Six highway bridges to be removed and replaced. Specifications, office of Carl E. Sheldon. Addition information, E. O. Hills, Engineer, Fulton, Illinois.

Bids: April 30.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock P.M., on Wednesday, the 30th day of April, 1919, for the construction of highways in the following counties:

ALBANY: Two highways, 1.36 and 4.16.
CHEMUNG: Approx. 0.40.
CHENANGO: Three highways, 4.78, 5.57, 5.87.
CLINTON: Approx. 3.34.
ESSEX: Approx. 4.95.
FULTON: Approx. 2.80.
HAMILTON: Approx. 6.82.
ONEIDA: Two highways, 0.97 and 1.05.
ONONDAGA: Five highways, 0.96, 7.45, 2.37, 1.76, 3.75.
OSWEGO: Approx. 5.44.
WARREN: Approx. 4.59.
WAYNE: Two highways, 3.83 and 3.21.
WESTCHESTER: Two highways, 1.74 and 1.09.

And also for the following repair contracts:

BROOME: One contract, reconstruction.
HAMILTON: One contract, resurfacing.
JEFFERSON: One contract, resurfacing.
ONONDAGA: One contract, resurfacing.
OSWEGO: One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "general Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY,
Commissioner.

I. J. MORRIS,
Secretary.

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on Wednesday, May 14, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie county, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall masonry portion about 1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately 1000 feet long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 1.

Sewers, Water Mains, Disposal Plant, Storage Reservoir, Transmission Line, Pump and Filter.

La Grange, Georgia.

Proposals will be received by the undersigned until 12 o'clock noon, May 1, 1919, for the construction of approximately eleven miles of sewers, Disposal Plant, four miles of Water Mains, Storage Reservoir, two miles Transmission Line, one 500,000 gallon Filter and one 500 gallons per minute Horizontal, Centrifugal pump direct connected to motor, and the furnishing of all materials and labor entering therein.

Specifications may be procured and plans and profiles seen at the office of the City Engineer, LaGrange, Ga., and general information from the undersigned.

Each proposal must be accompanied by a certified check in the sum of five (5) per cent of the amount bid, as evidence of good faith upon the part of the bidder.

A deposit of $10.00 will be required for each set of plans, which will be refunded on the return of plans in good condition.

The Town reserves the right to reject any and all bids, or waiving all formalities to accept any which may seem to be the best for the Town of South West La Grange.

C. W. COLEMAN, Mayor.
C. L. SMITH, Clerk & Treas.,
Southwest LaGrange, Ga.

G. H. SARGENT,
City Engineer,
LaGrange, Ga.

Bids: May 5.

Sewage Disposal Works

Macon, Missouri.

Sealed bids addressed to the "Honorable Mayor and Council," of the City of Macon, Mo., and endorsed "Proposal for Sewage Disposal Works," will be received until 8 P.M., May 5, 1919, at which time they will be publicly opened and read.

Certified check for $700 on a Macon (Mo.) bank, payable to the Treasurer of the City of Macon, Mo.

The work consists of furnishing labor and material, and constructing an Imhoff tank, sludge bed, storm overflow, approximately 790 lin.ft. of 18-in. sewer, and of straightening creek channel.

The City reserves the right to reject any or all bids. 85% monthly estimates in cash.

Sets of plans and specifications may be obtained from the City Clerk's office upon a deposit of $5, said deposit to be returned upon the return of the plans and specifications.

W. H. MARTIN, City Clerk.
Macon, Mo.

FRANK L. WILCOX, Engineer,
Syndicate Trust Bldg., St. Louis, Mo.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 A.M., April 30, 1919, for constructing about 200,000 cu.yd. of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710, Army Buildign, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

Bids: May 2.

Pavement Reconstruction

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., May 2, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon tnereafter as possible for the reconstruction of 40,004 linear feet of Reinforced Concrete & Hillside Vitrified Brick Paving, 18 feet wide, situated in Windsor Township, Berks County, and West Brunswick Township, Schuylkill County, on Route No. 141; 5443 Linear feet of Reinforced Concrete Pavement, 18 feet wide, situated in Duncansville Borough, Blair County, on Route No. 53; 16,177 Linear Feet of Vitrified Brick Paving, 18 feet wide, situated in Allegheny Township, Cambria County, on Route Nos. 53 and 276; 32,100 Linear Feet of Bituminous Surface and Hillside Vitrified Brick Pavement, 18 ft. wide, situated in Spring Township, Centre County, on Route No. 27; 21,626 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in W. Goshen & W. Whiteland Townships, Chester County, on Route No. 147; also 2334 Linear Feet of Reinforced Concrete Pavement, from 18′ to 32½′ in width, situated in Kennett Square Borough, Chester County, on Route No. 131; 26,648 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet. wide, situated in Paint and Elk Townships, Clarion County, on Route No. 65; also 1842 Linear Feet of Vitrified Brick Pavement, 16 and 35 feet wide, situated in Clarion Borough, Clarion County, on Route No. 65; 8414 Linear Feet of Reinforced Concrete and Hillside Vitrified Brick Pavement, 18 feet wide, situated in Walker and Formanagh Townships, Juniata County, on Route No. 31; 10,560 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Union Township, Luzerne County, on Route No. 4; also 22,452 Linear Feet of Bituminous Pavement, 18 feet wide, situated in Salem Township, Luzerne County, on Route No. 4; 26,310 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Charleston and Richmond Townships, Tioga County, on Route No. 21; also 10,717 Linear Feet of Reinforced Concrete Pavement, 18 feet wide, situated in Broken Straw Township, Warren County, on Route No. 88. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

L. S. SADLER,
State Highway Commissioner.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: May 8.

Sewer Construction

Platte, S. D.

Sealed proposals for the construction of a sewer system and sewage disposal plant will be received by the City Auditor in his office, in Platte, S. D., up to 8 P.M., May 8, 1919.

All bids must be on forms furnished by the City Auditor, or City Engineer, W. L. Bruce, Yankton, S.D., and shall be in accordance with the plans and specifications on file in the office of City Auditor and City Engineer, from whom copies may be obtained upon deposit of fifteen dollars, which amount will be returned upon receipt of plans and specifications in good order, within five days after date of receiving bids.

Each proposal shall be accompanied by a bond for 50% of bid.

C. F. SLATE,
City Auditor.

Bids: May 8.

Construction, Sanitary Work, Etc.

Newark, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Cottage for Inmates, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., will be received by Mrs. Sarah F. S. Armstrong, President, Board of Trustees, State Custodial Asylum for Feeble Minded Women, Newark, N. Y., until 12 o'clock noon, Thursday, May 8, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bonds in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3130, 3189, 3190, 3191. The right is reserved to reject any or all bids. Drawings and specifications and blank forms of proposal may be consulted at the New York State Custodial Asylum, Newark, N. Y., at the New York office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: April 11, 1919.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 m., May 1, 1919, and then opened, for removing wreck of "Steamship Serantes," sunk in upper bay, New York Harbor. Information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Road Construction

Monmouth, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Monmouth for the reconstruction of the Matawan-Freehold Road (second section), in the townships of Marlboro and Freehold, in the County of Monmouth, with a reinforced concrete surface, estimated amount of surface pavement required is 36,248 sq.yd., and opened and read in public at Freeholder's office, Court House, Freehold, N. J., on Wednesday, April 30, 1919, at eleven A. M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by George D. Cooper, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer, 60 Broad Street, Red Bank, New Jersey, and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and the name of the road on the outside, addressed to the Board of Chosen Freeholders of the County of Monmouth, and must be accompanied by a surety company certificate stating that the said surety company will provide the bidder with the required bond, and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders of the County of Monmouth.

WILLIAM M. BERGEN,
Director.

Attest:
C. E. Close, Clerk.
Dated: April 9, 1919.

Bids: May 1.

Poughkeepsie Pre-Filter Building Construction

Poughkeepsie, N. Y.

Sealed proposals endorsed "Proposals for Pre-Filter Construction at Poughkeepsie Water Purification Plant" will be received by the Board of Public Works at their office in Eastman Park Mansion until four P.M. May 1st.

The work consists in building a reinforced concrete structure and placing all the pipes, valves ,strainers, etc., which will be furnished by the Board of Public Works.

Plans and specifications may be seen at the office of the Board of Public Works; alsod at the office of Hazen, Whipple & Fuller, Consulting Engineers, 42nd. Street Building, New York City, or may be obtained by depositing thirty dollars. The deposit will be returned only upon the return of the plans in good condition within two weeks after the letting.

No proposal will be entertained unless made on the blanks furnished.

A certified check for nine hundred dollars must accompany the proposal.

The Board reserves the right to reject any or all proposals.

BOARD OF PUBLIC WORKS.
E. W. SYLVESTER,
Supt.

OFFICIAL PROPOSALS

Bids: May 6.

Road Improvements

STATE HIGHWAY COMMISSION,
DURHAM COUNTY, NORTH CAROLINA

Sealed bids for Road Improvements on the North Carolina Central Highway, in Durham County, North Carolina, will be received by the Board of County Commissioners at the County Court House in Durham, North Carolina, until 3 o'clock P.M., on the sixth (6th) day of May, 1919, opened and read publicly.

The work will consist approximately as follows:

78,900	Sq.yd. of brick, asphalt, cement, concrete, bituminous concrete, or other approved pavement. Combination cement concrete header curbing and base course required except with cement concrete construction.
4,000	Cu.yd. old macadam in present surface removed and replaced along edges of new pavement.
56.92	Cu.yd. Class "A" Concrete Culverts.
4774.0	Lb. reinforcing steel in Concrete Culverts.
75.66	Cu.yd. Class "B" Concrete Pipe Headwalls.
612.5	Lin.ft. 15" Standard Vitrified Pipe
152.5	Lin.ft. 18" Standard Vitrified Pipe
152.5	Lin.ft. 24" Standard Vitrified Pipe

No bid will be considered unless accompanied by cash, certified check, as specified in "Instructions to Bidders" for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the Office of the State Highway Commission, at Raleigh, North Carolina, upon the deposit of $5.00.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the State, County or Township.

By order of the Board of County Commissioners of Durham County.

This the 10th day of April, 1919.

A. L. CARLTON,
Chairman of Board of County
Commissioners of Durham County
M. G. MARKHAM,
Clerk or Secretary.

Bids: May 5.

Road Work

Fayetteville, W. Va.

Bids will be received up to May 5th, 1919, at the Office of J. K. McGrath, County Engineer, Fayetteville, West Va., for the grading of 10 miles of County road in Fayette County. This work is steam shovel and team work and will be let in two (2) sections of 5 miles each. Bids will be received on both sections, together or separately. There will be approximately 20,000 Cu.Yds. of excavation on each section. Specifications, bid sheets and all other necessary information can be had by applying to above named engineer. There will be a party on the ground to show bidders over the work May 1st, 1919.

A certified check of $1000.00 made payable to Thoney Pietro and Company, shall be filed with each bid. The right is reserved to reject any or all bids.

THONEY PIETRO & COMPANY
By JAMES CAIN.

OFFICIAL PROPOSALS

Bids: May 19.

Road Improvements

Tulsa. Oklahoma.

Notice is hereby given that on the 19th day of May, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider proposals for the grading, paving and otherwise improving the following Tulsa County Roads:

MILES......6..........of SECTION "L"
MILES..1 to 5..inclusive of SECTION "M"
MILES..3 to 5..inclusive of SECTION "I"
MILES..1 to 7..inclusive of SECTION "G"
Part of Mile 8 of Section "E," from East End of Mile 2, Section "I," North 1.3 Miles, Thence East 0.35 Miles to the town of Dawson.

Being a total of approximately 18 miles. Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before two (2) o'clock P.M. of the date above set out. Proposals to be accompanied with a certified check in an amount equal to approximately ten (10%) per cent. of the sum of the bid, drawn on a Bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 7th day of April, 1919.

BOARD OF COMMISSIONERS OF
TULSA COUNTY
By LEWIS CLINE, County Clerk.

Bids: May 5.

Furnishing Asphalt

Lansing, Mich.

The city of Lansing, Michigan, will receive sealed proposals for asphalt to be used in its construction work for the year 1919, in accordance with plans and specifications on file in the office of the City Engineer. Proposals to be received up to 4 o'clock P.M., Monday, May 5, 1919, at the office of the City Clerk of said city.

Each proposal to be accompanied with a certified check in the sum of $1000. Right is reserved to reject any or all bids.

JUDSON A. PARSONS,
City Clerk.

April 15, 1919.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., at 2 o'clock P.M., May 15, 1919, for furnishing and placing rip rap stone at light stations in the Chesapeake Bay and Potomac River. Information upon application to the above office.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals for furnishing and delivering Accumulators for Lock No. 41, and Operating Machinery for Lock No. 43, Ohio River, will be received here until 12 noon, central time, April 30, 1919, and then opened. Information on application.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

PROPOSALS FOR QUARTERS for eight married officers. Office Quartermaster, West Point, N. Y. Sealed proposals will be received here until 12 M., April 28, 1919, and then opened for construction of Quarters for Eight Married Officers. Information on application.

OFFICIAL PROPOSALS

Bids: April 30.

Bridge Construction

SOUTH CAROLINA STATE HIGHWAY COMMISSION

Lockhart, S. C.

Notice is hereby given that sealed proposals for the construction of highway improvement in Union and Chester Counties will be received at the office of Lockhart Mills, at Lockhart, South Carolina, until 12 o'clock, M., April 30, 1919, and then publicly opened.

DESCRIPTION OF WORK TO BE DONE:

To construct a steel highway bridge across the Broad River at Lockhart, South Carolina, of approximately seven hundred (700) feet in total length, consisting of two (2) spans of approximately two hundred and fifty (250) feet and tow (2) end spans of approximately one hundred (100) feet, and the necessary concrete piers and abutments therefor, containing approximately eight hundred and eighty-five (885) cubic yards of Class (1:2½:5) concrete and seven hundred and seventy-five (775) pounds of reinforcing steel. Width of roadway, 16 feet. Bidder to submit design of superstructure in compliance with South Carolina Highway Bridge Specifications.

Uniform live load of 80 pounds per square foot for each 100-ft. span and 64 pounds per square foot for each 250-ft. span. Concentrated live load, 15-ton truck as per specifications.

Detailed plans of the work may be seen for examination at the office of Lockhart Mills, at Lockhart, South Carolina, and at the offices of the State Highway Commission, Columbia, South Carolina. Bids may be submitted separately on substructure and on superstructure.

A certified check for one thousand dollars ($1000), made payable to order of the Chairman of the Commission to erect a bridge at or near Lockhart Mills, S. C., must accompany each proposal.

The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes and marked, "Bids on the Construction of the Lockhart bridge, between Union and Chester Counties."

Proposals may be sent by mail, and when sent by mail shall be inclosed in an additional sealed envelope properly marked as indicated above.

All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the State Highway Commission and will not be returned to the bidders.

J. ROY PENNELL,
State Highway Engineer.

PROPOSALS FOR MARINE RAILWAY. U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Jacksonville, Fla. Sealed proposals will be received here until 12 o'clock, noon, May 3, 1919, and then opened, for dredging in Miami Harbor (Biscayne Bay), Fla. Further information on application.

OFFICIAL PROPOSALS

Bids: May 1.

Pavement Construction

DEPARTMENT OF PUBLIC WORKS

Augusta, Georgia.

Sealed proposals will be received by the Streets and Drains Committee of the City Council of Augusta, Ga., at the City Hall, Augusta, Ga., until 12 o'clock noon, May 1, 1919, and at that time and place publicly opened, for the construction of approximately 55,000 sq.yd. pavement on Walton Way from 15th Street to Monte Sano Avenue.

Bids will be received on:

Asphaltic concrete, 4-in. concrete foundation.
Sheet asphalt, 4-in. concrete foundation.
Brick, monolithic construction.
6-in. concrete.

All bids must be accompanied by a certified check in favor of the City Council of Augusta, in the sum of 5% of the amount of the contract bid upon, to guarantee execution of contract if awarded.

The City Council reserves the right to reject any or all bids. Address bids to "Wm. Lyon Martin, Clerk of Council, Augusta, Ga.," marking on envelope, "Proposals Walton Way Pavement."

Plans and specifications may be had after April 16, 1919, by application to the undersigned.

W. H. WISE,
Acting City Engineer and Commissioner
Public Works.

Bids: April 30.

Drainage

Marion, Kansas.

Sealed bids will be received by the Board of Directors of the Cottonwood Valley Drainage District at their office in Marion, Kansas, until 1:30 P.M., on April 30, 1919, at which time they will be publicly opened, for the work of improvement of the Cottonwood River and its tributaries, in the Cottonwood Valley Drainage District.

Approximate estimate of work to be done:

New channel excavation	968,000 cu.yd.
Excavation from present channels	160,000 cu.yd.
Levee embankment	130,000 cu.yd.
Removal of obstruction other than earth from present channels	56,000 lin.ft.

The work is in four divisions.

Bids for one or more divisions will be considered.

All bids must be accompanied by a certified check on some bank doing business in the City of Marion, Kansas, payable to George Hauser, Treasurer, for $1500 for each division covered by bid to guarantee compliance with the terms of the bid.

For further information address the Board of Directors of the Cottonwood Valley Drainage District, Marion, Kansas, or Tuttle-Ayers-Woodward Engineering Co., Engineers for the Board, 305-7 Reliance Bldg., Kansas City, Mo.

The Engineer will be on the ground after April 28, for the purpose of furnishing information to bidders.

COTTONWOOD VALLEY DRAINAGE DISTRICT.
By F. R. WILLIAMS,
Secretary.

OFFICIAL PROPOSALS

Bids: May 19.

Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in East Avenue, from Maple Street to Wooster Avenue," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3900 ft. of vitrified pipe, sizes 12 to 24 in.
4700 ft. of trunk sewer, sizes 30 to 66 in.
35 manholes.

Each proposals must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 7.

Road Work

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the improvement of Section No. 2 of the Moorestown-Camden Pike, in the Township of Chester, in the County of Burlington, with a sheet asphalt surface upon a concrete foundation; estimated amount of surface pavement required is 5717 sq.yd. of foundation, 5717 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 12 noon.

Drawings and specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at No. 11 Main Street, Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.,
Clerk.

OFFICIAL PROPOSALS

Bids: May 7.

Road Work

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of the River Road, Palmyra to Broad Street, Beverly, in the townships of Palmyra, Cinnaminson, Delran, Beverly, and Burlington, in the County of Burlington, with sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 75,000 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11:50 A.M.

Specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission, Trenton, N. J., have been filed in the office of the said engineer at No. 11 Main Street, Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.
Clerk.

Bids: May 21.

Sewer

Akron, Ohio.

Sealed bids for proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in West Exchange Street, from Bowery to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3200 lin.ft. vitrified pipe, sizes 12 to 24 in.
5700 lin.ft. trunk sewer, sizes 30 to 120 in.
42 manholes.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: April 28.

Road Repairing

Scranton, Pa

Sealed proposals will be received in the office of the County Controller, Lackawanna County, Scranton, Pennsylvania, until 10:30 a.m., Monday, April 28th, 1919, for the repair of the County Road, running from the Luzerne County Line, through the Boroughs of Old Forge, Taylor, Dickson City, Blakely, Archbald, Jermyn, Mayfield, the Townships of Carbondale and Fell, and the Borough of Vandling, to the boundary line of the County of Susquehanna.

Specifications, etc., are on file in the office of the County Commissioners of Lackawanna County, Court House, Scranton, Pa., and may be seen or had by bidders upon application.

Certified check for five (5%) per cent of the amount of bid, drawn to the order of the County of Lackawanna, must be furnished wit heach proposal.

The right is reserved to reject any or all bids.

CHAS. P. SAVAGE,
Attest: County Controller.
RALPH COLLINS,
Deputy County Controller.

Bids: May 7.

Road Reconstruction

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders for Burlington County, N. J., for the reconstruction of the Moorestown-Mt. Holly Road, in the townships of Chester, Mt. Laurel, Lumberton and Northampton, in the County of Burlington, with sheet asphalt surface upon a macadam foundation; estimated amount of surface pavements required is 75,000 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11:40 A.M.

Specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission have been filed in the office of the said engineer at No. 11 Main Street, Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS., JR.
Clerk.

PROPOSALS FOR DREDGING. U. S Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m. May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application

OFFICIAL PROPOSALS

Bids: May 12.

Sewage Treatment Works

Pontiac, Mich.

Sealed proposals will be received at the office of the City Clerk, City Hall, until 1:30 P.M., May 12, 1919, for the construction of the Sewage Treatment Works.

The work contemplated comprises the construction of an outfall sewer, grit chamber, two-story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge, and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Outfall sewer	2,052 lin.ft.
Excavation	34,710 cu.yd.
Reinforced concrete	4,078 cu.yd.
Filter stone	15,700 cu.yd.
C. I. piping	35 tons

Plans and specifications are on file at the office of the City Clerk, City Hall, and copies may be obtained at the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Mich. A deposit of $15 (fifteen dollars) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for fifteen thousand dollars ($15,000).

Separate proposals will be entertained on the Outfall Sewer; a certified check for one thousand dollars ($1000) will be required where proposals are made on outfall sewes only.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the City Clerk on or before 1:30 P.M., May 12. 1919.

The city reserves the right to reject any or all bids.

By order of the City Commission.

C. W. HAM,
City Clerk.

Bid: May 3.

Concrete Bridge

City of North Adams, Mass.

Sealed proposals will be received at the office of the Commissioner of Public Works until 12 o'clock noon, May 3, 1919, for the construction of a reinforced concrete arch bridge on West Main Street, consisting of a single arch of 80 ft. clear span, length of bridge 108 ft., width 28 ft. A certified check for 5% of bid required. Plans and specifications may be obtained by responsible bidders upon application. The right is reserved to reject any or all bids.

JACKSON L. TEMPLE,
Commissioner of Public Works.

April 15, 1919.

Bids: May 19.

Bridge Construction

Phoenix, Arizona.

Bids will be received until 12 o'clock noon, May 19, 1919, for furnishing plans and specifications and constructing a bridge across the Verde River at Cottonwood, near Jerome, Arizona. Profile, topographic map and general specifications may be had by addressing Thomas Maddock, State Engineer, Phoenix, Arizona. Amount available, $40,000.

F. N. HOLMQUIST,
Office Engineer.

OFFICIAL PROPOSALS

Bids: May 29

Reservoir

BOROUGH OF TAMAQUA
OFFICE OF THE COMMISSIONERS OF WATER WORKS.

Tamaqua, Pa.

Sealed proposals will be received by the undersigned at their office in Tamaqua, Pa., until 12 o'clock noon of May 29, 1919, at which place and hour they will be publicly opened and read, for the construction of a reservoir on Owl Creek, in Rahn Township, Schuylkill County, for the Borough of Tamaqua.

The construction will involve about 57,000 cu.yd. of embankment and about 2000 cu.yd. of concrete, mass and reinforced.

Proposals must cover the entire construction, and the necessary labor and materials for same.

The right is reserved to reject any or all proposals and to readvertise and award the contract in the regular manner.

Plans and specifications may be seen at the office of the Commissioners of Water Works at Tamaqua; or they may be obtained from the Commissioners on payment of $3, which will be refunded upon return of plans and specifications in good condition.

Every proposal must be accompanied by a money deposit in the form of a draft or certified check, payable to the Borough of Tamaqua, for $2000.

The successful bidder will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them, or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the draft or certified check will be returned to the bidder.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of security required for faithful performance of the work will be 10 per cent. of the amount of the estimated cost of the work according to the contract price.

COMMISSIONERS OF WATER WORKS.
Borough of Tamaqua, Pa.
JOHN M. HARRIS.
Secretary.

Bids: May 9.

Concrete Pavements

Village of Patchogue, Suffolk Co., N. Y.

Sealed proposals for the construction of concrete pavements and curbing in North Ocean Avenue and Oak Street, in the Village of Patchogue, N. Y., will be received by the Village Clerk, under 8:15 o'clock P.M., Friday, May 9, 1919, when they will be publicly opened at the village office.

Plans and specifications for the work, which will include approximately 13,000 sq.yd. of concrete pavement and 3400 lin. ft. of concrete curbing may be obtained at the office of Edward A. May, Civil Engineer, Patchogue, N. Y., by payment of $1 to cover cost of producing same.

Each bid must be accompanied by a certified check for an amount equal to 5% of the amount of bid, made payable to the Village of Patchogue.

The right is reserved by the Board of Trustees to reject any or all bids.

E. AGATE FOSTER.
President.

EDWARD B. WOODRUFF, Clerk.

Dated: Apr. 24, 1919.

OFFICIAL PROPOSALS

Bids: June 2.

Constructing Drainage System

Beaufort, N. C.

Sealed proposals will be received by the Virginia-Carolina Farms Co. at Beaufort, N. C., until noon of the second day of June, 1919, for the following work:

Constructing New Canals (Side slopes: ½ to 1)
- 17 miles main canals, 6 to 10 ft. bottom x 8 ft. deep.
- 66 miles laterals, 3 ft. bottom x 6 ft. deep.
- 117 miles sub-laterals, 2 ft. bottom x 4½ ft. deep.

Enlarging existing canals to above sizes:
- 10 miles mains.
- 28 miles laterals.
- 35 miles sub-laterals.

Total excavation: Approximately 1,500,000 cu.yd.

Grading, 110 miles of roads.

Constructing 210 wooden bridges, requiring from 700 to 2200 ft. B.M. lumber per bridge.

Each proposal must be enclosed in a sealed envelope and addressed to the Virginia-Carolina Farms Co., Beaufort, N. C., and marked: "Proposal for Constructing Drainage System."

Each bidder must deposit with his bid cash or certified check, made payable to the Virginia-Carolina Farms Co., in the amount of $1000 as a guarantee of good faith that he will, if a contract is awarded him, execute a written contract to perform the same. Checks of unsuccessful bidders will be returned as soon as award is made.

All requests for information should be directed to B. M. Potter, Engineer, New Bern, N. C. Plans, specifications, forms of proposals, instructions, and a full set of maps and profiles will be furnished upon receipt of a deposit of $10, which amount will be refunded upon return of same in good condition.

VIRGINIA-CAROLINA FARMS CO.
G. S. SPEER, President.
B. M. POTTER, Engineer,
New Bern, N. C.

Bids: May 5.

Earth Fill Dam and Reservoir

GIRARD WATER COMPANY
POTTSVILLE, PA.
COST PLUS FEE CONTRACT

Pottsville, Pa.

Sealed proposals addressed to James Archbald, General Manager, Girard Water Company, Pottsville, Pa., will be received until 12 o'clock noon, May 5, 1919, for furnishing all materials, equipment and labor, and constructing an

EARTH FILL DAM OF ABOUT
100,000 CUBIC YARDS,

with concrete gate tower, bridge, spillway, and cut-off wall on Whiskey Mill Creek, Schuylkill County, Pa.

Plans, specifications and proposal form will be sent to prospective bidders upon receipt of twenty dollars which will be refunded upon return of the plans and specifications in good condition.

A certified check for $5000 must accompany each bid.

GIRARD WATER COMPANY,
JAMES ARCHBALD, Manager,
Pottsville, Pa.
GANNETT, SEELYE & FLEMING,
Engineers,
Harrisburg and Erie, Pa.

OFFICIAL PROPOSALS

Bids: May 20.

Mill Creek Flood Control Project

Erie, Pa.

Sealed proposals will be received by the City Council of the City of Erie, Pa., until 10:30 A.M. (Standard Eastern time), Tuesdays, May 20, 1919, for the completion of the Mill Creek Flood Control Project. Three separate contracts will be let, involving the following major items of work, covering about 8000 lin.ft. of reinforced concrete conduit and intake works.

SECTION NUMBER 3

Earth and shale Rock excavation	95,000 yds.
Reinforced concrete	19,000

SECTION NUMBER 4

Earth and shale rock excavation	73,000 yds.
Reinforced concrete	17,000

SECTION NUMBER 5 (Intake)

Earth and rock excavation	25,000
Concrete, plain and reinforced	2,000

Information for bidders, plans, specifications, and contract, for all three contracts, may be obtained on or about May 1, upon the deposit of $25, by addressing Gannett, Seelye and Fleming, Consulting Engineers, 204 Locust St., Harrisburg, Pa., or their Erie Office, 507 Palace Hardware Bldg. Deposit will be returned upon the delivery of the plans and specifications in good condition.

The appropriation for this work is $1,000,000.

THEODORE EICHHORN,
Com. of Streets and Public Improvements.
FAULKNER G. LYNCH, City Engineer.
GANNETT, SEELYE and FLEMING,
Consulting Engineers,
Harrisburg and Erie, Pa.

Bids: May 7.

Road Work

CLARK COUNTY ROAD DISTRICT NO. 1

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Ark., until 2 P.M., May the 7th, 1919, and will then be publicly opened and read. The work contemplated is the building of 93 miles of gravelled roads radiating from the City of Arkadelphia, Clark County, Ark., together with culverts, bridges, etc.

The work has been divided into five sections, ranging in length from ten to thirty miles. Bids will be compared on a basis of the engineers' estimates, copies of which may be obtained free of cost from the engineers or the attorney of the district. Plans and specifications are on file at the office of the County Clerk in Clark County and at the office of the engineers in Little Rock, and may there be seen. Blue prints of alignment, grades and bridges comprising fifty sheets may be obtained from the engineers for $10. Specifications may be obtained from the engineers free of cost.

Bids must be accompanied by a certified check for 5% of the value of the work bid upon, and a construction bond of 25% will be required of the successful bidder.

The right is reserved to reject any and all bids.

BOARD OF COMMISSIONERS,
Clark County Road District No. 1
J. G. CLARK, President.
W. E. BARKMAN, Secretary.
McMILLAN and McMILLAN, Att'ys.
Arkadelphia, Arkansas.
LUND and HILL, Engrs.,
Little Rock, Arkansas.

OFFICIAL PROPOSALS

Bids: May 21.

Repaving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Repaving West Exchange Street, from Bowery to Maple Street" will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

5,200 cu.yd.	excavation.
1,000 lin.ft.	sandstone curb.
670 lin.ft.	granite circular curb.
5,800 lin.ft.	curb redressed and reset.
14,100 sq.yd.	stone block or vitrified brick pavement.
37,000 sq.ft.	artificial stone walks.
32	street inlets.
700 lin.ft.	12 in. inlet pipe.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 19.

Paving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for paving East Avenue from Wooster Avenue to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

9,800 cu.yd.	of excavation.
8,900 lin.ft.	sandstone curb.
1,100 lin.ft.	granite circle curb.
15,250 sq.yd.	brick, asphalt or asphaltic concrete pavement.
1,750 sq.yd.	hillside brick pavement.
53,600 sq.ft.	artificial stone walks.
51	street inlets.
1,460 lin.ft.	12 in. inlet pipe.

Each proposal must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

OFFICIAL PROPOSALS

Bids: May 7.

Road Reconstruction

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of the Camden County line, Marlton-Medford Road, in the townships of Evesham and Medford in the County of Burlington, with a sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 75,000 sq.yd., and opened and read in public at the Court House on Wednesday, May 7, 1919, at 11:30 A M.

Specifications and forms of bid, contract and bond for the proposed work prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of said engineer at No. 11 Main St., Mt. Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and the name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal forms are attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.
Clerk

Bids: May 9.

Steel Improvement

OFFICE OF
THE DIRECTOR OF PUBLIC WORKS

Norfolk, Va

Sealed proposals will be received at the office of the City Manager until 12 o'clock noon on the 9th day of May, 1919, for improving with sheet asphalt certain streets designated as Class A, aggregating 27,000 sq.yd and certain other streets designated Class B, aggregating 17,000 sq.yd. including incidental work, in the City of Norfolk, Virginia, at which time and place the same will be publicly opened.

A schedule of the work, specifications and proposal blanks can be had at the Office of Director of Public Works. Bids made on said proposal blanks must be sealed and addressed to Mr. Chas E. Ashburner, City Manager, marked, "Paving Proposal, May 9, 1919."

A certified check on some local bank in the sum of three thousand ($3000) dollars, payable to B. Gray Tunstall, City Treasurer, or a bidder's bond from well recognized surety company must accompany each bid under the conditions expressed in the proposal.

The right to reject any or all bids is especially reserved or the right to award by classes or in part.

CHAS. E. ASHBURNER,
City Manager.

WALTER H. TAYLOR, 3rd,
Director Public Works.
April 17, 1919.

Bids: May 12.

Santa Fe Trail Road Work

KANSAS HIGHWAY COMMISSION

Hutchinson, Kansas

Project No. 15

SECTION A

1. Notice is hereby given that sealed proposals for the construction of Federal Aid road work in Medford, Salt Creek and Grant Townships, Reno County, State of Kansas, said road work known as the New Santa Fé Trail Road, Section A, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county and townships before mentioned. Said proposed improvement includes the construction of an 18 ft. wide monolithic brick road with six ft. wide earth shoulders, together with all work involved and indicated by the plans and specifications therewith, beginning at Station 0 plus 00, which is a point on the Reno and Rice county line and extending in an easterly direction for a distance of 38,200 ft., of which 37,454 ft. are to be improved.

The point of beginning is approximately 4 miles by road from the A. T. & S. F. railroad passenger depot at Sterling, Kansas.

Station No. 382 plus 00 is approximately ½ mile from the A. T. & S. F. railroad siding at Nickerson, Kansas.

Station No. 382 plus 00 is approximately ½ mile from the Mo. Pac. railroad siding at Nickerson, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reject any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART,
April 10, 1919. County Clerk.

Project No. 15

SECTION B

1. Notice is hereby given that sealed proposals for the construction of Federal Aid road work in Grant Township, Renc County, State of Kansas, said road work known as the New Santa Fé Trail Road, Section B, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county and township before mentioned. Said proposed improvement includes the construction of an 18 ft. wide monolithic brick road with six ft. wide earth shoulders, together with all work involved and indicated by the plans and specifications therewith, beginniing at Station 432 plus 51.1, a point at the east corporate limits of the city of Nickerson, Kansas, and extending in an easterly and southerly direction for a distance of 28,942.3 ft., of which 28,942.8 ft. are to be improved.

The point of beginning is approximately ½ mile by road from the A. T. & S. F. railroad passenger depot at Nickerson, Kansas.

Station No. 432 plus 51.1 is approximately 1 mile from the Missouri Pacific railroad siding at Nickerson, Kansas.

Station No. 721 plus 93.6 is approximately 1¼ miles from the A. T. & S. F. and M. P. railroad siding at Yaggy, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reject any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Project No. 15

SECTION C

1. Notice is hereby given that sealed proposals for the construction of Federal Aid road work in Reno and Grant townships, Reno County, State of Kansas, said road work known as the New Santa Fé Trail Road, Section C, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county and townships before mentioned. Said proposed improvement includes the construction of an 18 ft. wide monolithic brick road with six ft. wide earth shoulders, together with all work involved and indicated by the plans and specifications therewith, beginning at Station 721 plus 93.6, a point in the center of the public highway at the end of Section B, and extending in a southerly and easterly direction, for a distance of 26,383.4 ft., of which 26,383.4 ft. are to be improved.

The point of beginning is approximately 1¼ miles by road from the A. T. & S. F. and M. P. railroad depot at Yaggy, Kansas. Station No. 985 plus 77 is approximately 1 mile from the A. T. & S. F. railroad siding at Hutchinson, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reect any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Project No. 15

SECTION D

1. Notice is hereby given that sealed proposals for the construction of concrete bridge work in Medford and Grant townships, Reno County, State of Kansas, said bridge work being located on the road known as the New Santa Fé Trail Road, Section D, Project No. 15, will be received at the office of the County Clerk at Hutchinson, Kansas, until 12 o'clock M., Monday, May 12, 1919, and then publicly opened.

2. The proposed work is located on the public highway in the county before mentioned. Said proposed improvement includes the construction of three reinforced concrete bridges, together with all work involved and indicated by the plans and specifications therewith; said bridges being herein designated as Bridge Station 12 plus 70, Bridge Station 483 plus 50, Bridge Station 679 plus 90. Bridge Station 12 plus 70 is approximately 3¼ miles by road from the A. T. & S. F. and M. P. railroad passenger depot at Sterling, Kansas. Bridge Station 483 plus 50 is approximately 1 mile from the railroad siding at Nickerson, Kansas. Bridge Station 679 plus 90 is approximately 2 miles from the railroad siding at Yaggy, Kansas.

3. Detailed information of the work to be done may be had by an examination of the plans and specifications on file in the office of the County Clerk.

4. The Board of Commissioners reserves the right to reject any and all proposals and to waive technicalities.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Portland Cement

FEDERAL AID PROJECT NO. 15

Notice is hereby given that sealed proposals will be received at the office of the County Clerk, Hutchinson, Kansas, until 11 A.M., Monday, May 12, 1919, for the Portland cement required in the construction of Federal Aid Project No. 15, Reno County, Kansas.

All proposals otherwise submitted may be rejected as irregular.

The Board of County Commissioners reserves the right to reject any and all proposals.

Full information may be obtained by writing direct to Chas. H. Stewart, County Clerk or W. B. Harris, County Engineer, Hutchinson, Kansas.

By Order of the Board of County Commissioners.

CHAS. H. STEWART.
April 10, 1919. County Clerk.

Vitrified Brick

FEDERAL AID PROJECT NO. 15

Notice is hereby given that sealed proposals will be received at the office of the County Clerk, Hutchinson, Kansas, until 11 A.M., Monday, May 12, 1919, for the vitrified paving brick required in the construction of Federal Aid Project No. 15, Reno County, Kansas.

All proposals otherwise submitted may be rejected as irregular.

The Board of County Commissioners reserve the right to reect any and all proposals.

Full information may be obtained by writing direct to Chas. H. Stewart, County Clerk, or W. B. Harris, County Engineer, Hutchinson, Kansas.

By Order of the Board of County Commissioners.

CHAS. H. STEWART,
April 10, 1919. County Clerk.

OFFICIAL PROPOSALS

Bids: May 6.

Paving

Edgerton, Ohio.

1. Sealed bids for the paving of Michigan Avenue from the N. Line of Hull St. to the S. Line of Sargent St. (except between the interesections of Indiana St. and Vine St.); Michigan Avenue and Clarksville Road from the S. Line of Sargent St. to the S. Corporation Line; Hicksville Road from the S. Line of Clarksville Road to the S. Corporation Line, in the village of Edgerton, Ohio, in accordance with the plans and specifications on file with the Village Clerk, will be received by said Clerk, until 12 o'clock noon, on Tuesday, May 6, 1919, and thereupon publicly opened and read.

2. Bids shall state the prices for materials and labor, on the blanks provided therefor; shall be enclosed in a sealed envelope marked, "Bid for Pavement," and addressed to the Village Clerk.

3. Each bid shall contain the full name of every person or company interested in it, and shall be accompanied by a certified check on a solvent back, payable to the Village Clerk, in the sum of $2000, as a guarantee that, if the bid is accepted, a contract and an approved bond equal to the bid to secure the performance of the contract, will be entered into within 10 days from the date of notice of award of contract.

4. Each bid for block pavement shall be accompanied by 6 sample blocks, labelled with the name of the block, manufacturer and bidder. Each bid for bituminous pavement shall be acompanied by a sample of the bituminous cement, labelled with the name of the bitumen, manufacturer and bidder.

5. The Council reserves the right to reject any and all bids. By order of the Village Council of Edgerton, Ohio.

April 8, 1919.

GEORGE CHAMPE, Civ. Engr.,
Toledo, O.
E. M. GABRIEL, Clerk.

PRELIMINARY ESTIMATE

1.	Grading	6,850	cu.yds.
2.	27 inch Pipe Sewer	100	lin.ft.
3.	15 inch Pipe Sewer	1,350	lin.ft.
4.	12 inch Pipe Sewer	745	lin.ft.
5.	10 inch Pipe Sewer	990	lin.ft.
6.	Manholes	10	
7.	Catch Basins	20	
8.	Circular Curb	470	lin.ft.
9.	Straight Curb	5,310	lin.ft.
10.	Pavement	14,391	sq.yds.
11.	Cost of Construction	55,430	Dollars

Bids: May 5.

Paving, Bridging, Grading, Etc.

Dallas, Tex.

Notice is hereby given that sealed proposals will be received by Chas. E. Gross, County Auditor for Dallas County at Dallas, Tex., up to ten o'clock A.M., Monday, May 5, 1919, for the construction of a concrete pavement, including concrete bridging, grading, etc., on the Dallas-Ft. Worth Road, between the City of Dallas and the Dallas-Tarrant County line.

Approximate quantities are as follows:

Concrete pavement	106,000 sq.yd.
Concrete bridging	1,300 cu.yd.
Steel reinforcement	210,000 pounds
Grading	70,000 cu.yd.

A certified check in the sum of $10,000 made payable to Cecil L. Simpson, County Judge, shall accompany each proposal. Dallas County reserves the right to reject any or all bids. Plans on file with the State Highway Department at Austin, Texas, also with J. F. Witt, County Engineer for Dallas County at Dallas, Texas.

CHAS. E. GROSS,
County Auditor.

OFFICIAL PROPOSALS

Bids: April 28

Paving

Elmira Heights, N. Y.

Sealed proposals will be received by Norvan Shook Clerk of the Village of Elmira Heights, N. Y., for the construction approximately of

10,500 sq.yd. Vitrified shale brick pitch filled pavement.
3,075 lin.ft. straight concrete curb with protection bar.
380 lin.ft. curved concrete curb with protection bar.
700 lin.ft. 5" medina headers.

on 14th St. in said Village until 10 A.M. on the 27th day of April, 1919, at which time they will be publicly opened and read in the Office of the Board of Trustees, Village Hall, Elmira Heights, N. Y.

Plans and Specifications for the proposed work will be on exhibition at the said office after April 16th, 1919.

A certified check of ($2000.00) Two Thousand Dollars made payable to the Village Treasurer of Elmira Heights must accompany all bids.

The Village Board reserves the right to reject any or all bids.

Village Clerk.
NORVAN SHOOK,
SILAS M. HAIGHT,
Village Engineer.

PROPOSALS FOR the purchase of locomotives, dump and flat cars offered for sale by The Panama Canal.—Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10.30 o'clock a.m., June 2, 1919, at which time they will be opened in public, for purchasing the above-mentioned material. Blanks and information relating to this Circular (1273) may be obtained from this office or the offices of the assistant purchasing agents, 24 State Street, New York City; 606 Common Street, New Orleans, La.; and Fort Mason, San Francisco, Calif.; also from the United States engineer offices in the principal cities throughout the United States.—A. L. Flint, General Purchasing Officer.

Bids: April 25.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building one section of Stat Highway, as follows:

PRINCE GEORGE COUNTY,
Contract WB-Z:

One section of Baltimore-Washington Boulevard between Laurel and Hyattsville. 0.5 miles of 20 ft. concrete shoulders on each side of present roadway.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., on the 25th day of April, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the plan proposal form which with Specifications and plans, will be furnished b ythe Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of fice hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond ,and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 9th day of April, 1919.

FRANK K. ZOUCK,
Chairman.
CLYDE H. WILSON, Secretary.

OFFICIAL PROPOSALS

Bids: May 6.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building the following:

BALTIMORE CITY, CONTRACT BC-29A: One section of Monroe Street from Eagle Street to Mosher Street for a distance of 1.18 miles. Sheet asphalt.

CAROLINE COUNTY, CONTRACT Co-18: One section of State Highway between Grove and Bureau, for a distance of 2.50 miles. Concrete.

MONTGOMERY COUNTY, CONTRACT M-17: One section of State Highway through Rockville, for a distance of 1.76 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 6th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 21st day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: May 12.

Road Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the reconstruction of Penn Grove-Pennsville Road, Second Section, in the townships of Upper Penns Neck and Lower Penns Neck, in the County of Salem, with a concrete surface; estimated amount of surface pavement required is 10,400 sq.yd., and opened and read in public at the Court House in Salem, N. J., on May 12, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By Order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk

OFFICIAL PROPOSALS

Bids: May 14.

Road Construction

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of Atlantic County, N. J., at Freeholders Meeting Room, 523 & 524 Guarantee Trust Bldg., Atlantic City, N. J., at 11 A.M. on May 14th, for the reconstruction of two sections of Mays Landing-Pleasantville Road in the Townships of Hamilton and Egg Harbor in the County of Atlantic and State of New Jersey with a bituminous concrete surface upon a concrete foundation; estimated amount of surface pavement required is 44.249.1 square yards, of foundation 44,249.1 square yards; and opened and read in public at the aforesaid time and place.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by A. H. Nelson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Atlantic City, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, baring th name and address of bidder and name of road on the outside, adderssed to The Board of Chosen Freeholders of Atlantic County, N. J., and must be accompanied by the name and certificate of proposed surety and a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

Bids: May 14.

Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 4, Section IA. Concrete Surface, estimated 1400 square yards. Monmouth County.

State Highway Route No. 3, Da Costa-Hammonton Section. Concrete Surface, estimated 46,658 square yards. Atlantic County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, May 14, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Put Public Buying on an Efficiency Basis

Now, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Thousands of reliable contractors and manufacturers constantly seek opportunities to bid on contracts for public work or supplies. They compete for it. That keeps public expenditures down. It makes the taxpayers' money go farther. It puts public buying on an efficient basis. It makes local bidders figure more closely.

These contractors and manufacturers naturally seek news of contracts where it is most plentiful. They read

ENGINEERING NEWS-RECORD

A Consolidation of Engineering News, Engineering Record and the Contractor

the best known and most widely read papers used for the advertising of contracts to be let. Practically every worth-while contractor and manufacturer who wants to figure on public contracts reads Engineering News-Record. No guessing. No uncertainty. Engineering News-Record, with its circulation of 33,000 copies weekly, reaches practically *all* the men who would be interested in advertised contracts.

Proposal Advertising Rate, $3.60 an inch an issue. (About 10 cents per thousand circulation.)

As a government, state or municipal engineer, or public official you should use this means of giving your taxpayers the biggest value for their money. Advertise your contracts in the News-Record—the one nationally recognized medium for this class of advertising.

Look at the Proposals in this issue and see how other communities use it.

0063

OFFICIAL PROPOSALS

Bids: May 20.

Dam Construction

Stamford, Texas.

Sealed bids will be received by the Mayor and Board of Commissioners of the City of Stamford, Texas, until noon May 20, 1919, and then publicly opened and read, for furnishing all equipment ,tools, labor, materials, etc., necessary for constructing the following:

A dam across the Clear Fork of the Braezs River. The dam contemplated contains approximately nine thousand cubic yards of rubble and concrete masonry, seventy thousand cubic yards earthworth and minor items. A concrete pipe line from river to pumping station (about twelve miles), a cast iron pipe line from pumping station to Stamford (about two miles) and two earthen reservoirs along the pipe line. Plans and specifications for the dam are separate, and either or both sets will be mailed to prospective bidders on receipt of $25.00 for each set, which will be returned only upon their return in good order within two weeks after opening bids. Bids will be considered on all or a part. The right is reserved to reject any and all bids and to waive informalities.

A certified check covering four per cent. of the work bid on must accompany each bid and be made payable to R. L. Penick, Mayor of Stamford, Texas, as an evidence of good faith.

R. L. PENICK, Mayor,
Stmaford, Texas.

Bids: May 6.

Grading and Paving

Omaha, Neb.

Sealed proposals to be received by City Clerk of Omaha, up to nine o'clock on Tuesday, May 6, for grading and repaving within District No. 1721, including 150,000 cu.yd. grading and 20,000 sq.yd. of paving. Approximate private grading work in connection with the above, 200,000 cu.yd. Grading and paving contracts may be let separately.

Plans and specifications on file with John A. Bruce, City Engineer, Chicago office of Engineering News-Record. Work to be commenced about October 1; time limit for grading within district, four months.

Certified check, five per cent. of total bid.

JOHN A. BRUCE,
Omaha, April 17, 1919. City Engineer.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: May 8.

Paving

Milan, Mich.

1. Sealed bids for the paving of Wabash St. from the South End of the Bridge over the Saline River to the South Corporation Line, in the Village of Milan, Mich., in accordance with the plans and specifications on file with the Village Clerk, will be received by said Clerk, until 1:30 o'clock P.M. on Thursday, May 8th, 1919, and thereupon publicly opened and read.

2. Bids shall state the prices in words and figures, on the blanks provided therefor, shall be enclosed in a sealed envelope marked "Bid for Pavement" and addressed to the Village Clerk.

3. Each bid shall contain the full name of every person or company interested in it and shall be accompanied by a certified check on a solvent bank, payable to the Village Clerk, in the sum of 1000 Dollars, as a guaranty that, if the bid is accepted, a contract and an approved bond equal to the bid to secure the performance of the contract, will be entered into within ten (10) days from the date of notice of award of contract.

4. Each bid for bituminous pavement shall be accompanied by a sample of bituminous cement, labelled with the name of the bitumen, manufacturer and bidder.

5. The Council reserves the right to reject any and all bids.

By order of the Village Council of Milan, Mich., April 14, 1919.

GEORGE CHAMPE, Civ. Engr.,
Toledo, Ohio.
JESSE BUTTON, Clerk.

PRELIMINARY ESTIMATE

1.	Grading	4,100	cu.yds.
2.	10 inch Pipe Sewer	220	lin.ft.
3.	Manholes	4	
4.	Catch Basins	12	
5.	Inlets	8	
6.	Straight Curb	4,724	lin.ft.
7.	Circular Curb	703	lin.ft.
8.	4 inch Drain Tile	5,427	lin.ft.
9.	Pavement	8,448	sq.yds.
10.	Cost of Construction	27,695	Dollars

BIDS WANTED

30000 yd. Traction Shovel Work, mostly overcasting.

Or will rent shovel

Empire Engineering Company, Inc.
Buffalo, N. Y.

OFFICIAL PROPOSALS

Bids: May 6.

Storm Sewer

Dearborn, Mich

Sealed proposals will be received at the office of the Village Clerk, Village Hall, until 8:00 P.M., May 6, 1919, for the construction of a Storm Water Sewer lying in Military, Garrison, Beeson and Adeline Streets.

The work consists of approximately as follows:

1013	lin.ft.	of	6′ 3″	Circular	Sewer
1634	"	"	5′ 9″	"	"
950	"	"	5′ 6″	"	"
575	"	"	5′ 0″	"	"
930	"	"	4′ 6″	"	"
1237	"	"	4′ 0″	"	"

Plans and specifications are on file at the office of the Village Clerk, Dearborn, Michigan, and copies may be obtained at the office of Clarence W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Michigan. A deposit of $10.00 (ten dollars) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for seven thousand dollars ($7000.00). All certificate accompany rejected proposals will be returned. Should any proposal be accepted, the party or parties making same shall execute a contract and furnish the required surety bonds satisfactory to the Village of Dearborn,within ten days after receiving notice; or, failing so to do, the certificate of deposit shall be forfeited to the said Village of Dearborn.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the Village Clerk on or before 8:00 P.M., May 6, 1919.

The Village reserves the right to reject any or all bids.

By order of the Village Commission.

FRED C. REAMER,
Village Clerk.

Bids: April 28.

Paving

Elmira, N. Y.

Sealed proposals for grading, curbing and paving the below named streets will be received by the undersigned at his office in the City Hall until 11:30 o'clock A.M., April 28, 1919:

Woodlawn Ave., 2800 sq.yd.
East & West First Street, 2400 sq.yd.
Walnut Street, 14,900 sq.yd.

Plans and specifications are on file in the City Engineer's Office, City Hall, where also may be obtained the "proposal sheets" which must be used.

Separate certified checks are required as follows:

Woodlawn Ave., $1100; E. and W. First Sts., $900; Walnut St., $6200 payable to the order of the Mayor of Elmira, N. Y., and must accompany the bids. They will be returned to the bidders upon execution of the contracts.

The envelopes must be endorsed "Proposals for Pavements."

The Board of Public Works reserves the right to reject any or all bids.

LOUIS C. ANDREWS,
City Clerk.

WARNING

Select with care the man who handles

YOUR

Contract Bonds and Insurance

Be as careful as you would be in selecting your attorney for an important case in court. Proper representation before the Underwriters is vital in building your credit standing with the Surety Companies.

You will find in this respect that

SWART SERVICE REALLY SERVES

Try me out on your next bond.

HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: May 12.

Paving

CITY OF ONEONTA, NEW YORK.
DEPARTMENT OF PUBLIC WORK.

Sealed bids or proposals will be received by the Board of Public Works, at the City Clerk's Office, at Oneonta, New York, until 8 P.M., on the 12th day of May, 1919, for the improvement named below, at which time and place such proposals will be publicly opened and read.

Paving with bituminous macadam, Maple Street from Main Street to south line of Center Street; Maple Street from south line of Center Street to Normal School Grounds; Elm Street from Main Street to Cedar Street and Spruce Street from Elm Street to Maple Street, together with such sewer constructions as is necessary for the paving.

All bids must be made on the regular printed forms furnished for that purpose, and all prices must be plainly stated in ink, both in wards and figures.

Plans and specifications are on file in the City Engineer's office and may be obtained for the price of five dollars ($5), said five dollars will not be refunded upon return of the plans, but will be retained by the City of Oneonta as a part compensation for the printing of the same.

All bids will be considered informal, which do not contain prices set opposite each and all of the items which enter into the construction of the particular kind of pavement bid upon, and which are called for in the printed forms for bids, or which are otherwise not in conformity with this notice.

No bid shall be allowed to be withdrawn for any reason whatever, after it has been presented to the Board of Public Works.

No bid shall be accepted from, or contract awarded to any person who is in arrears to the City of Oneonta upon debt or contract, or who is in default as surety or otherwise, upon any obligation to said city.

All bids which, in the opinion of the Board of Public Works, are unbalanced will be deemed informal.

Bidders are required to state in their bids their names and places of residence, and the names of all persons interested with them in said bids. Also that the bid is made without any connection with any persons making another bid for the same contract, and that the bid is in all respects fair and without collusion of fraud.

A certified check in an amount equal to at least five (5%) per cent. of the bid, payable to the Chamberlain of the City of Oneonta, will be required to accompany each bid. All such deposits, except that of the bidder whose bid shall have been accepted, will be returned to the person or persons making the same within three days (3) after the execution of the contract. If the bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within fifteen (15) days after the notice that it has been awarded to him or them, the amount of the deposit made by him or them will be forfeited to and retained by the City of Oneonta as liquidated damages for such neglect or refusal. But if he or they shall execute the contract within the time aforesaid, the amount of his or their deposit will be returned to him or them.

No contract will be considered unless accompanied with a surety bond in an amount equal to fifty (50%) per cent. of the bid, approved as to sufficiency by the Board of Public Works, and conditioned that if the contract be accepted, the proposer will construct the work at the prices and upon the terms proposed, according to the plans and specifications, and subject to the supervision and approval of the City Engineer, and also conditioned for the faithful performance of all the provisions of the contract.

The Board of Public Works reserves the right to reject any or all bids not deemed for the interest of the City.

The Engineer's estimate of quantities, as attached to the bidding form, will be used only as a basis of computing and canvassing the various bids.

Bidders are required to form their own judgment of the quantities and character of the work by personal examination of the ground where it is to be done and of the specifications and the drawings relating to it, or by such other means as they may prefer.

Bidders must not assert any misunderstanding in regard to any thing relating to the work, or the location and ground where it is to be executed.

BOARD OF PUBLIC WORKS,
CITY OF ONEONTA
SHELDON H. CLOSE,
City Clerk.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

Bids: May 8.

Paving

Lorain, Ohio.

Sealed proposals will be received by the director of public service of the City of Lorain, State of Ohio, at the office of said director until 12 o'clock noon, May 8, 1919, for the furnishing of labor and material for approximately 70,000 sq.yd. of street paving. For further information write C. C. Miller, City Engineer.

OFFICIAL PROPOSALS

Bids: May 15.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 15th day of May, 1919, for the completion of the following highways:

Cattaraugus...Three highways: 6.88, 4.73 and 2.17
Chautauqua...One highway: 3.90
Delaware......One highway: 6.51
Erie..........One highway: 5.19
Montgomery...Two highways: 2.49 and 1.61
Nassau........Three highways: 4.98, 3.09 and 3.38
Niagara.......One highway: 7.79
Onondaga.....One highway: 5.55
Orange........One highway: 9.18
Ulster.........One highway: 3.17
Wayne........One highway: 3.97

Also for the construction of the following highways:

Onondaga.....One highway: 3.94
Rensselaer....One highway: 3.80

And also for the repair of the following highways:

Columbia......One contract, reconstruction
Livingston.....One contract, reconstruction
Montgomery...One contract, reconstruction
Niagara........One contract reconstruction
Orange........Two contracts, reconstruction and resurfacing
St. Lawrence..One contract, resurfacing
Steuben.......One contract, resurfacing
Westchester...Four contracts, reconstruction

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose divisions the roads to be completed are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
R. K. FULLER,
Secretary.

Bids: May 6.

Highway Work

Clarion, Iowa.

Bids will be received until 2 P.M., May 6, by the Board of Supervisors of Wright County, Ia., at Clarion, Ia., for the grading of 10.37 miles of county road, involving approximately 42,000 cu.yd.

Bids: June 2.

Extension of Water Mains

North Mankato, Minn.

Sealed proposals will be received at Village Recorder's office, North Mankato, Minn., until 8 P.M., June 2, 1919, then opened, for extension of water mains, and furnishing of material. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Road Construction

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of Atlantic County, N. J., at Freeholders Meeting Room, 523 & 524 Guarantee Trust Bldg., Atlantic City, N. J., at 11 A.M. on May 14th, for the reconstruction of two sections of Mays Landing-Pleasantville Road in the Townships of Hamilton and Egg Harbor in the County of Atlantic and State of New Jersey with a bituminous concrete surface upon a concrete foundation; estimated amount of surface pavement required is 44.249.1 square yards, of foundation 44,249.1 square yards; and opened and read in public at the aforesaid time and place.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by A. H. Nelson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Atlantic City, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, baring th name and address of bidder and name of road on the outside, adderssed to The Board of Chosen Freeholders of Atlantic County, N. J., and must be accompanied by the name and certificate of proposed surety and a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

Bids: May 9.

Concrete Pavements

Village of Patchogue, Suffolk Co., N. Y.

Sealed proposals for the construction of concrete pavements and curbing in North Ocean Avenue and Oak Street, in the Village of Patchogue, N. Y., will be received by the Village Clerk, under 8:15 o'clock P.M., Friday, May 9, 1919, when they will be publicly opened at the village office.

Plans and specifications for the work, which will include approximately 13,000 sq.yd. of concrete pavement and 3400 lin. ft. of concrete curbing may be obtained at the office of Edward A. May, Civil Engineer, Patchogue, N. Y., by payment of $1 to cover cost of producing same.

Each bid must be accompanied by a certified check for an amount equal to 5% of the amount of bid, made payable to the Village of Patchogue.

The right is reserved by the Board of Trustees to reject any or all bids.

E. AGATE FOSTER,
President.
EDWARD B. WOODRUFF, Clerk.

OFFICIAL PROPOSALS

Bids: May 14.

Road Work

Pineville, W. Va.

Sealed proposals will be received by the County Court of Wyoming County, until 1 o'clock P.M. on May 14, 1919, for the construction and completion of one section of earth road leading from Elmore Yards, at the mouth of Barkers Creek, up said Creek to the mouth of Gooney Otter, a distance of approximately four miles, and consisting of approximately 40,000 cu.yd. of excavation, 500 cu.yd. of random rubble masonry, 400 cu.yd. of concrete, and 100 yd. of dry random rubble retaining walls.

Work consists of grading and construction of bridges and small drainage structures to be done in accordance with the specifications and plans of the State Road Commission on file in the Engineer's office in the town of Pineville, West Virginia, and the contract to be executed by the successful bidder, as well also as the proposal for said work shall be on the forms now adopted and used by the State Road Commission.

All bids must be accompanied by a certified check for five per cent. of the total amount of the bid, and the bid must be securely sealed and filed with the Clerk of the County Court of Wyoming County, West Virginia, at his office in the town of Pineville, West Virginia, on standard form of proposal furnished with specifications which said proposal and specifications shall be those that are adopted as the standard proposal and specifications used by the State Road Commission.

The Court reserves the right to reject any and all bids for said work.

Dated at Pineville, West Virginia, this the 8th day of April, 1919. by order of the Court.

(Signed) WILL P. COOK.
Clerk.

Bids: May 5.

Drag-Line Work

Clinton, Iowa.

The County Board of Supervisors of Clinton County, Iowa, will receive sealed bids at the Office of the County Auditor, at Clinton, Iowa, up to 2 p.m., May 5th, 1919, for deepening and widening a part of the Old Goose Lake Drainage Ditch. Drag-line work. No floater or steam shovel work allowed. Check to accompany bid in separate envelope. Check for 10 per cent. of bid, and bond for 25 per cent. of cost. Length of ditch, approximately 10,500 feet. Excavation required, approximately 15,000 cubic yards. Estimated cost, $5250.00. Specifications and Plans may be seen at the Office of the County Auditor.

JOHN W. STROHM,
County Auditor.
BENTON R. ANDERSON, Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., April 26, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 6, 1919, for the construction of the United States Post Office at Bellefourche, South Dakota. Drawings and specifications may be obtained from the Custodian of the site at Bellefourche, South Dakota, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

OFFICIAL PROPOSALS

Bids: May 7.

Stokers and Drivers

DEPARTMENT OF PUBLIC
IMPROVEMENTS,
SUB-DEPARTMENT OF HIGHWAYS
ENGINEER.

Baltimore, Maryland.

Sealed proposals, in duplicate, endorsed "Bids for furnishing and erecting one Four Hundred and three Two Hundred and Sixty-six Horse-power Mechanical Side-feed Stokers and Drivers for Sewage Pumping Station, Eastern Avenue and President Street, Baltimore, Maryland," addressed to the Board of Awards of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Maryland, until noon, Wednesday, May 7, 1919.

Specifications can be obtained at the office of the Highways Engineer, City Hall, Baltimore, Maryland, on and after April 23, 1919. A charge of $5 will be made for each set of specifications; this amount will be refunded upon the return of these specifications in good condition before noon of May 7, 1919. Specifications used in making a bid will be considered as returned.

A certified check of the bidder on a Clearing House Bank, made payable to the Mayor and City Council of Baltimore, for the sum of twelve hundred dollars ($1200) will be required with each bid.

The extent of the work is approximately as follows:

For furnishing and erecting complete ready for brick-work one Four Hundred (400) and three (3) Two Hundred and Sixty-six (266) Horse-power Side Feed type Mechanical Stokers, and the furnishing and creting complete of two Stoker Engines.

The successful bidder will be required to give bond and comply with the City Charter respecting contracts.

The Board of Awards reserves the right to reject any or all bids.

GEORGE F. WIEGHARDT,
Highways Engineer.
April 23, 1919. Baltimore, Maryland.

Bids: May 14.

Dam Construction

Gilboa, New York.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 11 A.M., on Wednesday, May 14, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie county, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts, an overfall masonry portion about 1300 feet in length and having a maximum height of about 160 feet, and an earthen section approximately 1000 feet long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK.
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 10.

Pavement Construction

City of Pittsfield, Mass.

Sealed bids or proposals for constructing pavements and appurtenances, addressed to the Clerk of the Board of Public Works, will be received at the office of the Board of Public Works, City Hall, Pittsfield, Mass., until 2:30 o'clock P.M., of the tenth day of May, 1919. At the above place and time the bids will be publicly opened and read.

Pavement on South Street; the principal items of work are about 33,000 sq.yd. of pavement; about 8000 lin.ft. of curbs and other miscellaneous work. Alternative bids on different types of pavements will be received, which must be accompanied by a certified check for thirty-five hundred dollars drawn upon a national bank or trust company established in Pittsfield, Boston, or New York, and calls for a bond of thirty-five thousand dollars.

Pavement on West Housantonic and other streets; the principal items of work are about 14,000 sq.yd. of pavement; about 6000 lin.ft. of curbs and other miscellaneous work. Alternative bids on different types of pavements will be received, which must be accompanied by a certified check for fifteen hundred dollars drawn upon a national bank or trust company established in Pittsfield, Boston, or New York, and calls for a bond of fifteen thousand dollars.

Pavement on Pecks Road; the principal items of work are about 9500 sq.yd. of pavement, and other miscellaneous work. Alternative bids on different types of pavement will be received, which must be accompanied by a certified check for one thousand dollars, drawn upon a national bank or trust company established in Pittsfield, Boston, or New York, and calls for a bond of ten thousand dollars.

Pamphlets containing information for bidders, form of proposal, contract, specifications and plans will be mailed to contractors who apply to the Engineer of the Board of Public Works, or may be obtained at his office.

Bidders may bid on one, two, or all the contracts and the right is reserved to reject any or all bids, or to accept any bid.

Mayor and Chairman Paving Committee.
WILLIAM C. MOULTON,
A. B. FARNHAM,
Engineer Board of Public Works.

PROPOSALS FOR JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater, at Calumet Harbor, Ill. and Ind. Further information on application.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Philadelphia, Pa., at 2 o'clock P.M., May 26, 1919, for furnishing rip rap and for building mud banks at Baker Range Front Light Station, Delaware River, Del. Information upon application to the above office.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

Bids: May 20.

Mill Creek Flood Control Project

Erie, Pa.

Sealed proposals will be received by the City Council of the City of Erie, Pa., until 10:30 A.M. (Standard Eastern time), Tuesdays, May 20, 1919, for the completion of the Mill Creek Flood Control Project. Three separate contracts will be let, involving the following major items of work, covering about 8000 lin.ft. of reinforced concrete conduit and intake works.

SECTION NUMBER 3	
Earth and shale Rock excavation	95,000 yds.
Reinforced concrete	19,000
SECTION NUMBER 4	
Earth and shale rock excavation	73,000 yds.
Reinforced concrete	17,000
SECTION NUMBER 5 (Intake)	
Earth and rock excavation	25,000
Concrete, plain and reinforced	2,000

Information for bidders, plans, specifications, and contract, for all three contracts, may be obtained on or about May 1, upon the deposit of $25, by addressing Gannett, Seelye and Fleming, Consulting Engineers, 204 Locust St., Harrisburg, Pa., or their Erie Office, 507 Palace Hardware Bldg. Deposit will be returned upon the delivery of the plans and specifications in good condition.

The appropriation for this work is $1,000,000.

THEODORE EICHHORN,
Com. of Streets and Public Improvements.
FAULKNER G. LYNCH, City Engineer.
GANNETT, SEELYE and FLEMING,
Consulting Engineers,
Harrisburg and Erie, Pa.

Bids: May 19.

Paving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for paving East Avenue from Wooster Avenue to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

9,800 cu.yd. of excavation.
8,900 lin.ft. sandstone curb.
1,100 lin.ft. granite circle curb.
15,250 sq.yd. brick, asphalt or asphaltic concrete pavement.
1,750 sq.yd. hillside brick pavement.
53,600 sq.ft. artificial stone walks.
51 street inlets.
1,460 lin.ft. 12 in. inlet pipe.

Each proposal must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 21.

Sewer

Akron, Ohio.

Sealed bids for proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in West Exchange Street, from Bowery to Maple Street," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3200 lin.ft. vitrified pipe, sizes 12 to 24 in.
5700 lin.ft. trunk sewer, sizes 30 to 120 in.
42 manholes.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 21.

Repaving

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Repaving West Exchange Street, from Bowery to Maple Street" will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Wednesday, the 21st day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

5,200 cu.yd. excavation.
1,000 lin.ft. sandstone curb.
670 lin.ft. granite circular curb.
5,800 lin.ft. curb redressed and reset.
14,100 sq.yd. stone block or vitrified brick pavement.
37,000 sq.ft. artificial stone walks.
32 street inlets.
700 lin.ft. 12 in. inlet pipe.

Each proposal must be accompanied by certified check in the sum of five hundred dollars ($500).

A surety bond in the sum fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after the taking of bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 7.

Road Work

CLARK COUNTY ROAD DISTRICT NO. 1

Little Rock, Ark.

Notice is hereby given that sealed bids will be received at the office of the State Highway Department, Little Rock, Ark., until 2 P.M., May the 7th, 1919, and will then be publicly opened and read. The work contemplated is the building of 93 miles of gravelled roads radiating from the City of Arkadelphia, Clark County, Ark., together with culverts, bridges, etc.

The work has been divided into five sections, ranging in length from ten to thirty miles. Bids will be compared on a basis of the engineers' estimates, copies of which may be obtained free of cost from the engineers or the attorney of the district. Plans and specifications are on file at the office of the County Clerk in Clark County and at the office of the engineers in Little Rock, and may there be seen. Blue prints of alignment, grades and bridges comprising fifty sheets may be obtained from the engineers for $10. Specifications may be obtained from the engineers free of cost.

Bids must be accompanied by a certified check for 5% of the value of the work bid upon, and a construction bond of 25% will be required of the successful bidder.

The right is reserved to reject any and all bids.

BOARD OF COMMISSIONERS,
Clark County Road District No. 1
J. G. CLARK, President.
W. E. BARKMAN, Secretary.
McMILLAN and McMILLAN, Att'ys.
Arkadelphia, Arkansas.
LUND and HILL, Engrs.,
Little Rock, Arkansas.

Bids: May 15.

Ornamental Street Lighting System

Mandan, North Dakota.

The Board of City Commissioners will receive sealed bids, at the office of the City Auditor, Mandan, N. D., until eight o'clock P.M., May 15, 1919, for the furnishing of all material including plant equipment and labor for the installation of an ornamental street lighting system.

The work to be done embraces approximately 80 blocks, with 294 posts.

Each proposal shall be accompanied by a certified check of $500 and a bond running to the city in a sum equal to 5% of the amount of the bid.

Plans and specifications are on file with the City Auditor or may be obtained from the engineers by depositing $5.

The right is reserved to reject any or all bids.

H. L. HENKE,
Pres. City Commission.
W. H. SEITZ, City Auditor.
BLACK & GRIFFIN, Engineers.

Bids: May 13.

Sewer Bonds For Sale

Frederick, Okla.

The City of Frederick, Okla., will offer for sale on Tuesday evening, May 13, 1919 (subject to approval of the property owners of said City at a special election to be called immediately thereafter), one hundred and fifty thousand ($150,000) dollars more or less of 30-year Sanitary Sewer Bonds. The Mayor and Council reserve the right to reject any or all bids.

D. W. WOMACK,
City Clerk.

Bids: May 12.

Road Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the reconstruction of Penn Grove-Pennsville Road, Second Section, in the townships of Upper Penns Neck and Lower Penns Neck, in the County of Salem, with a concrete surface; estimated amount of surface pavement required is 10,400 sq.yd., and opened and read in public at the Court House in Salem, N. J., on May 12, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By Order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY.
Clerk.

Bids: May 16.

Ditch Construction

Grant City, Mo.

Notice is hereby given that on Friday, the 16th day of May, 1919, at 2:00 o'clock p.m., at the office of the Secretary of Worth County Drainage District Number One in the Town of Grant City, Missouri, bids will be received by W. C. Okey, Secretary of the District for the construction of the Main Ditch and 8 lateral ditches, as set out in "The Plan for Reclamation" of said District.

The letting will be public outcry. If contractors are unable to attend the letting they may send in their bid by mail to W. C. Okey, Secretary, Grant City, Missouri.

Bids will be based on 961,000 cubic yards earth excavation in the Main Ditch and 32,315 cubic yards of earth excavation in the 8 lateral ditches.

Certified check or Bidder's Bond, 5% of the amount of bid. Surety bond, 40% of the cost of the work contracted for.

For further information address W. C. Okey, Secretary, Grant City, Missouri, or Clark E. Jacoby Engineering Company, 528 Shukert Building, Kansas City, Missouri.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Boston, Mass.—Sealed proposals will be received here until 12 M., May 3, 1919, and then opened, for dredging at Hog Island, Boston, Harbor, Mass. Further information on application.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals for maintenance dredging in New Haven Harbor, Conn., will be received here until 2 o'clock p.m., May 20, 1919 and then opened. Information on application.

Bids: May 29

Reservoir

BOROUGH OF TAMAQUA
OFFICE OF THE COMMISSIONERS OF WATER WORKS.

Tamaqua, Pa.

Sealed proposals will be received by the undersigned at their office in Tamaqua, Pa., until 12 o'clock noon of May 29, 1919, at which place and hour they will be publicly opened and read, for the construction of a reservoir on Owl Creek, in Rahn Township, Schuylkill County, for the Borough of Tamaqua.

The construction will involve about 57,000 cu.yd. of embankment and about 2000 cu.yd. of concrete, mass and reinforced.

Proposals must cover the entire construction, and the necessary labor and materials for same.

The right is reserved to reject any or all proposals and to readvertise and award the contract in the regular manner.

Plans and specifications may be seen at the office of the Commissioners of Water Works at Tamaqua; or they may be obtained from the Commissioners on payment of $3, which will be refunded upon return of plans and specifications in good condition.

Every proposal must be accompanied by a money deposit in the form of a draft or certified check, payable to the Borough of Tamaqua, for $2000.

The successful bidder will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them, or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the draft or certified check will be returned to the bidder.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of security required for faithful performance of the work will be 10 per cent. of the amount of the estimated cost of the work according to the contract price.

COMMISSIONERS OF WATER WORKS.
Borough of Tamaqua, Pa.
JOHN M. HARRIS.
Secretary.

Bids: May 14.

EXTENSION OF DATE

Westerly Sewage Treatment Works

Cleveland, Ohio.

In order to give the contractors more time to prepare their bids for construction of Cleveland's Westerly Sewage Treatment Works, it has been decided to change the date of receiving bids from May 6 to May 14. (Previously advertised in issues of April 3rd and 10th.)

UNITED STATES ENGINEER OFFICE Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging and rock removal in East River, N. Y., will be received here until 12 m., May 9, 1919, and then opened. Further information on application.

PROPOSALS FOR MARINE RAILWAY U. S. Engineer Office, Philadelphia, Pa Sealed proposals will be received here until 12 noon, May 8, 1919, and then opened, for the construction of a marine railway at Fort Mifflin, Philadelphia, Pa. Further information on application.

OFFICIAL PROPOSALS

Bids: June 2.

Constructing Drainage System

Beaufort, N. C.

Sealed proposals will be received by the Virginia-Carolina Farms Co. at Beaufort, N. C., until noon of the second day of June, 1919, for the following work:

Constructing New Canals (Side slopes: ½ to 1)
- 17 miles main canals, 6 to 10 ft. bottom x 8 ft. deep.
- 66 miles laterals, 3 ft. bottom x 6 ft. deep.
- 117 miles sub-laterals, 2 ft. bottom x 4½ ft. deep.

Enlarging existing canals to above sizes:
- 10 miles mains.
- 28 miles laterals.
- 35 miles sub-laterals.

Total excavation: Approximately 1,500,000 cu.yd.

Grading, 110 miles of roads.

Constructing 210 wooden bridges, requiring from 700 to 2200 ft. B.M. lumber per bridge.

Each proposal must be enclosed in a sealed envelope and addressed to the Virginia-Carolina Farms Co., Beaufort, N. C., and marked: "Proposal for Constructing Drainage System."

Each bidder must deposit with his bid cash or certified check, made payable to the Virginia-Carolina Farms Co., in the amount of $1000 as a guarantee of good faith that he will, if a contract is awarded him, execute a written contract to perform the same. Checks of unsuccessful bidders will be returned as soon as award is made.

All requests for information should be directed to B. M. Potter, Engineer, New Bern, N. C. Plans, specifications, forms of proposals, instructions, and a full set of maps and profiles will be furnished upon receipt of a deposit of $10, which amount will be refunded upon return of same in good condition.

VIRGINIA-CAROLINA FARMS CO.
G. S. SPEER, President.
B. M. POTTER, Engineer,
New Bern, N. C.

Bids: May 7.

Filters

City of Winston-Salem, N. C.

Sealed proposals for the construction of certain filters for the City of Winston-Salem, will be received by the City of Winston-Salem, up to four o'clock P.M., of the 7th day of May, 1919. Proposals to be addressed to Commissioner of Public Works and endorsed: "Proposals for Constructing Filters."

Plans may be seen, and specifications and blank forms of proposal may be obtained at the office of the Commissioner of Public Works.

A certified check equal to 5% of the amount of the bid and made payable to the Treasurer of the City of Winston-Salem will be required to accompany each bid.

The right is reserved to reject any and all bids or any part of a bid.

JOSEPH FIRTH,
Commissioner of Public Works,

PROPOSALS FOR DREDGING. U. S. Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey, for the improvement of the following:

State Highway Route No. 4, Section IA. Concrete Surface, estimated 1400 square yards. Monmouth County.

State Highway Route No. 3, Da Costa-Hammonton Section. Concrete Surface, estimated 46,658 square yards. Atlantic County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, May 14, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 10.

Reinforced Concrete Bridge

Adrian, Mich.

Sealed proposals will be received by the Adrian City Commission until 1:30 o'clock P.M., May 10, 1919, for the construction of a reinforced concrete bridge over the Raisin River on West Maumee Street, in the City of Adrian; bridge to be 54 ft. between abutments, 22 ft. from floor of bridge to bed of stream. Bidders to furnish own plans and specifications.

The City of Adrian reserves the right to reject any and all bids.

For further information apply to N. B. Washburn, Commissioner of Public Improvements, Adrian, Michigan.

G. PERCY LOVE,
City Clerk.

OFFICIAL PROPOSALS

Bids: May 8, 1919.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 8th day of May, 1919, at 2 P.M., in the Mayor's office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from the intersection of Reservoir Street to City line. Brick, bithulitic, concrete, tarvia or bituminous material. Certified check for 10% of amount of bid must accompany proposal. Successful bidder must file bond for 50% of total amount of contract.

EUGENE M. HEBERT,
Secretary.

Bids: May 6.

Road Improvements

STATE HIGHWAY COMMISSION,
DURHAM COUNTY, NORTH CAROLINA

Sealed bids for Road Improvements on the North Carolina Central Highway, in Durham County, North Carolina, will be received by the Board of County Commissioners at the County Court, House in Durham, North Carolina, until 3 o'clock P.M., on the sixth (6th) day of May, 1919, opened and read publicly.

The work will consist approximately as follows:

78,900	Sq.yd. of brick, asphalt, cement, concrete, bituminous concrete, or other approved pavement. Combination cement concrete header curbing and base course required except with cement concrete construction.
4,000	Cu.yd. old macadam in present surface removed and replaced along edges of new pavement.
56.92	Cu.yd. Class "A" Concrete Culverts.
4774.0	Lb. reinforcing steel in Concrete Culverts.
75.66	Cu.yd. Class "B" Concrete Pipe Headwalls.
612.5	Lin.ft. 15" Standard Vitrified Pipe.
152.5	Lin.ft. 18" Standard Vitrified Pipe.
152.5	Lin.ft. 24" Standard Vitrified Pipe.

No bid will be considered unless accompanied by cash, certified check, as specified in "Instructions to Bidders" for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the Office of the State Highway Commission, at Raleigh, North Carolina, upon the deposit of $5.00.

The right is reserved to reject any or all proposals or to accept the proposal or proposals deemed best for the State, County or Township.

By order of the Board of County Commissioners of Durham County.

This the 10th day of April, 1919.

A. L. CARLTON,
Chairman of Board of County
Commissioners of Durham County.
M. G. MARKHAM,
Clerk or Secretary.

OFFICIAL PROPOSALS

Bids: May 15.

Paving

Lebanon, Pa.

Sealed proposals directed to the City Clerk of Lebanon, Pa., will be received at the City Hall until 5 P.M., Thursday, May 15, and publicly opened at a special Council meeting that same evening, for the furnishing of all labor and materials required to construct the following pavements:

Cumberland Street—4th St. to 5th St., approximately.....	1,500 sq.yds.
Cumberland Street—9th St. to Pennsylvania R.R. approximately	4,600 " "
Cumberland Street—Pennsylvania R.R. to 16th St. approximately	9,000 " "
Chestnut Street—4th St. to 12th St. approximately....	16,700 " "

Alternate bids will be received on Woodblock, Vitrified Brick, Cement Concrete, Asphaltic Concrete and Sheet Asphalt. The Contractor may bid on any or all of these different types of surfacing.

Certified check of $250, $700, $1500, $2500 respectively, must accompany each bid.

Specifications, proposal blanks and detailed information concerning the condition and manner of submitting bids can be obtained by applying to the City Engineer. A deposit of $5.00 is required for each complete set of the specifications sent out. This will be refunded upon the return of the specifications in good condition.

Payment for the work done in paving the street intersections and in all drainage structures will be by monthly estimates. Payment for all other work will be made by two-year improvements bonds of the City of Lebanon, bearing 6 per cent. interest. The security for the payment and redemption of these bonds is the assessment levied against the abutting property owners as provided for by an act of Assembly entitled, "An act providing for the Incorporation of 3rd Class Cities" approved May 23, 1889, and any supplements thereto which may be applicable.

Plans of streets and standard structures may be seen at the City Engineer's office.

The Mayor and Council reserve the right to reject any or all bids and to award the contract as is deemed to the best interest of the City of Lebanon.

PAUL A. VOLCKER,
City Engineer.

Attest:
DAN M. SHARP,
City Clerk.

Bids: May 6.

Grading and Paving

Omaha, Neb.

Sealed proposals to be received by City Clerk of Omaha, up to nine o'clock on Tuesday, May 6, for grading and repaving within District No. 1721, including 150,000 cu.yd. grading and 20,000 sq.yd. of paving. Approximate private grading work in connection with the above, 200,000 cu.yd. Grading and paving contracts may be let separately.

Plans and specifications on file with John A. Bruce, City Engineer, Chicago office of Engineering News-Record. Work to be commenced about October 1; time limit for grading within district, four months.

Certified check, five per cent. of total bid.

JOHN A. BRUCE,
Omaha, April 17, 1919. City Engineer.

OFFICIAL PROPOSALS

Bids: May 8.

Road Oiling

Poughkeepsie, N. Y.

Sealed proposals will be received by the Board of Public Works at their office in Eastman Park Mansion up to 4 P.M., Thursday, May 8, 1919, for the following:

Furnishing and applying asphaltic oil of 40% to 50% asphaltic content to approximately 300,000 sq.yd. of earth and macadam streets during the season of 1919.

Price to be per square yard treated.

A certified check for $300 must accompany each proposal. Specifications can be obtained from or will be mailed by the Clerk of the Board of Public Works upon receipt of a deposit of $5.

The right is expressly reserved to reject any or all proposals.

E. W. SYLVESTER,
Supt. Public Works.

Dated: April 25, 1919.

Bids: May 9.

Road Reconstruction

Johnstown, Pa.

Sealed proposals addressed to the Supervisors of East Carroll Township, Cambria County, Penn., in care of the County Controller, Ebensburg, Penn., will be received up until 2 o'clock P.M., and publicly opened and read in the Commissioners' office at 2:30 o'clock P.M., on the 9th day of May, A. D. 1919, for furnishing all labor and material for the reconstruction of (7) seven miles and 152 ft. in East Carroll Township, Cambria County, Penn., from Patton to Carrolltown and from Bradley Junction to 1 mile south of Carrolltown, with an eighteen foot roadway of vitrified brick paving block on a concrete base and curb.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, Engineer for East Carroll Township, Leader Building, Johnstown, Penn. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. Contractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Board of Supervisors and County Commissioners, amount of which must be equal to the gross amount of the contract.

The Supervisors reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 2,775,000 No. 1 repressed vitrified paving blocks, f.o.b. cars nearest point of delivery to work.

By order of Charles Yeckley, T. B. Airhart, Herman Illig, Supervisors of East Carroll Township, Cambria County, Penn.

O. P. THOMAS,
Engineer.

OFFICIAL PROPOSALS

Bids: May 15.

Street Improvements

Cumberland, Md.

Sealed proposals addressed to the Mayor and City Council of Cumberland, Md., and endorsed "Proposals for the paving and otherwise improving streets in the City of Cumberland, Md.," will be received at the office of the City Clerk on or before 9:30 A.M., May 15, 1919. Plans and specifications may be obtained at the office of the City Engineer. A deposit of one dollar ($1) for each plan will be required, which will be refunded upon the return of same in good condition. Specifications will be furnished free of charge to each bidder receiving one or more plans.

This work embraces curbing, paving and otherwise improving on eight (8) streets, aggregating approximately, as follows:

9,135 ft. concrete curbing.
7,050 sq.yd. concrete paving.
930 sq.yd. wood block paving.
14,200 sq.yd. brick paving (semi-monolithic) and miscellaneous sewer work, etc.

Alternate oids will be asked on 11,280 sq.yd. of Sheet Asphalt on part of the above mentioned paving.

Each proposal must be accompanied by a certified check drawn to the order of the Mayor and City Council of Cumberland, Md., amounting to one hundred dollars ($100) for each and every street bid on, which check will be forfeited to the Mayor and City Council of said City as liquidated damages in case an award is made and the contract and bond are not promptly and properly executed. The Mayor and City Council reserve the right to reject any or all bids, and further, to contract for all or any part of said work.

RALPH L. RIZER, City Engineer,
City Hall, Cumberland, Md.

Bids: May 16.

Fire Proof Grade School

Grand Rapids, Mich.

Sealed tenders marked, "Bids for New Henry School," will be received for the General Construction, Heating and Ventilating, Plumbing and Sewering, Electrical Work, Vacuum Cleaning Apparatus, etc., as per plans and specifications, on file at the office of the architect, Henry H. Turner, 234 Division Avenue, North, Grand Rapids, Michigan.

Bids will be received on or before four (4) o'clock P.M., May 16, 1919, addressed to Herbert N. Morrill, Business Manager, Board of Education, City Hall, Grand Rapids, Michigan. All bids must be sealed and accompanied by a certified check as per following schedule:

	Per Cent. of Bid
Bids under $5000.................	10
Bids $5000 to $25,000............	7½
Bids $25,000 to $50,000..........	5
Bids $50,000 or over.............	3

made payable to the President of the Board of Education, and will be returned when the successful bidder has qualified and signed contract. This certified deposit check is demanded as a guarantee that the successful bidder will sign the contract and furnish the necessary bonds within ten days after the contract is presented to him for signature. The right is reserved to reject any or all bids.

THE BOARD OF EDUCATION.
HENRY E. CROW,
President.

Attest:
H. N. MORRILL, Secretary.

OFFICIAL PROPOSALS

Bids: May 12.

Hospital Building, Power House, Laundry and Tunnel

CITY OF HIGHLAND PARK, MICHIGAN.

Sealed proposals in *triplicate* will be received by the City of Highland Park, 20 Gerald Avenue, Highland Park, Michigan, at the office of the City Clerk, up to 8 o'clock P.M., May 12, 1919, for general work, heating, plumbing, electric, lighting fixtures, refrigeration, sterilizers, laundry machinery, cooking apparatus, lockers, for a four story basement and sub-basement hospital building, a two story power house and laundry and connecting tunnel for the City of Highland Park, Michigan.

All bids must be made on the regular bid blanks which will be furnished to the contractors in quadruplicate, three copies to be signed, sealed and returned and the fourth to be filed by the bidder.

Separate bids will be received for each, all or any number of the above enumerated items.

Each bid must be accompaned by a certified check for at least 5% of the bid, as a guarantee that the accepted bidder will enter into contract.

The successful bidder must furnish acceptable bond in the sum of the full amount of his contract.

Right is reserved to reject any or all bids and to waive defect in any bid if deemed to the interest of the city to do so.

Plans and specifications may be obtained upon application at the office of the City Engineer, L. C. Whitsit, 28 Gerald Avenue, Highland Park, Michigan.

All requests for plans and specifications must be accompanied by a certified check for $25, payable to the City of Highland Park, Michigan for the return of such plans and specifications in good order.

DELMER C. GOWING,
City Clerk.

Bids: May 6.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building one section of State Highway, as follows:

WICOMICO AND SOMERSET COUNTIES, CONTRACT NO. 094-A: One section of road over the Allen Mill Dam, for a distance of 0.23 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 6th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 25th day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

OFFICIAL PROPOSALS

Bids: May 20.

Street Paving

OFFICE OF THE BOARD OF COMMISSIONERS
Nashville, Tenn.

Notice is hereby given that sealed proposals will be received at the office of the Secretary of the Board of Commissioners until 10 o'clock A.M., Tuesday, May 20, 1919, for the construction of certain Bitulithic Paving under Special Benefit Improvement Ordinances Nos. 102, 103, 104, 105; certain Asphaltic Concrete Paving under Special Benefit Improvement Ordinance No. 106; certain Recut Granite Block Paving under Special Benefit Improvement Ordinances Nos. 107, 108, 109, 110, 111, 112; certain Wood Block Paving under Special Benefit Improvement Ordinances Nos. 113, 114; and certain Macadam Paving (Oil and Gravel Surface Treatment) under Special Benefit Improvement Ordinance No. 115.

Separate proposals must be submitted for each street and must be on blank forms accompanying specifications, which will be furnished by William W. Southgate, City Engineer, upon request. Proposals must be accompanied by a certified check or cashier's check of a national bank located in Nashville, Tenn., payable to the order of the Board of Commissioners, in an amount equivalent to 10 per cent. of the aggregate bid, or an approved bond in the penal sum of a like amount, with at least two good solvent sureties, who are citizens or residents of Nashville, Tenn., or in lieu of personal sureties, the bond of some surety company authorized to execute such a bond in the State of Tennessee. The said checks or bonds will be returned to unsuccessful bidders upon award of contracts, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. A deposit of $5 will be required to accompany each application for specifications, and which will be returned to the depositor either upon the filing of bids or upon the return of the specifications. The right is reserved to reject any and all bids.

By order of the Board of Commissioners. WM. GUPTON, Mayor.

Attest:
J. W. DASHIELL, Secretary.

Bids: May 12.

Road Grading

Great Falls, S. C.

Sealed proposals for grading the road from Great Falls to Wateree will be received by the Great Falls Farms Co. until noon, May 12. The work will be let in two sections; Section 2, 10 miles and Section 3, 15 miles. The work will average five thousand cubic yards per mile, with several stream crossings of twenty thousand cubic yards in addition. Information may be obtained from Alfred T. Jones, Engineer Roads and Bridges, Great Falls, S. C.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Drainage Channels

Poplar Bluff, Mo.

Sealed proposals for the construction of 7,200,000 cu.yd. of earth excavation for drainage channels will be received until 10 o'clock P.M., May 14, 1919, by the Board of Supervisors of the Inter-River Drainage District of Missouri at their office at Poplar Bluff, Mo.

Bids will be accepted for the work as a whole or for any contract or combination of contracts into which the work has been divided.

No proposal will be considered unless accompanied by a satisfactory corporate proposal bond, in the form approved by the District or by a certified check for not less than 5% of the amount of the bid, but in no case need a certified check exceed $10,000.

The bidder or bidders, to whom awards are made will be required to enter into written contracts with the District in the form approved by the District, with good and approved security for the full amount of the contract, within twenty days after being notified of the acceptance of his proposal.

The right is reserved to reject any or all bids or to waive any informality in the bids received.

Payments for the work will be made in cash. Requests for information and for plans and specifications should be addressed to the Morgan Engineering Company, Memphis, Tennessee.

INTER-RIVER DRAINAGE DISTRICT OF MISSOURI.
A. H. FREDERICK, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: May 8.

Bridge Construction

CITY ENGINEER'S OFFICE
NO. 17 CITY HALL.
New Haven, Conn.

Sealed proposals will be received at this office until 11 a.m., May 8, 1919, for the construction of a three span rolled steel girder beam bridge of Bethlehem sections on Washington Avenue over West River. Total length of bridge 125 feet, width 50 feet. Two new abutments and two new piers to be built of local sandstone on pile and timber foundation. All steel work to be encased in concrete. Flooring to be of reinforced concrete slab construction.

Plans, proposals and specifications can be obtained at the City Engineer's Office on or after April 28th.

A certified check, for 5% of bid, made payable to the Controller of the City of New Haven must accompany each proposal.

No proposals will be received after the time specified, and all proposals not on the blanks furnished or not properly filled out will be rejected.

The right to reject any or all bids is reserved.

By order of the Director of Public Works.

F. L. FORD,
April 23, 1919. City Engineer.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock, noon, May 15, 1919, and then opened, for dredging in New Bedford Harbor, Mass. Further information on application.

Bids: May 7.

Water Tube Boiler

DEPARTMENT OF PUBLIC
IMPROVEMENTS,
SUB-DEPARTMENT OF HIGHWAYS
ENGINEER.

Baltimore, Md.

Sealed proposals in duplicate, endorsed "Bids for furnishing and erecting Four Hundred Horse Power Water Tube Boiler for Sewage Pumping Station" will be received at the office of the City Register, City Hall, Baltimore, Maryland, until 12 noon, Wednesday, May 7, 1919.

Specifications can be obtained at the office of the Highways Engineer, City Hall, Baltimore, Maryland, on and after April 23, 1919. A charge of five dollars ($5) will be made for each set of specifications. This amount will be refunded upon the return of those specifications in good condition before noon of May 7, 1919. The specifications used in making a bid will be considered as returned.

A certified check of the bidder on a Clearing House Bank, made payable to the Mayor and City Council of Baltimore, for the sum of $1000 will be required with each bid.

The extent of the work is approximately as follows:

For furnishing and erecting complete ready for brick work, on foundation furnished by the City, one Four Hundred Horse Power Water Tube Boiler, together with all iron work and accessories, including Soot Blower.

The successful bidder will be required to give bond and comply with the City Charter respecting contracts.

Bids are asked for on two items and the Board of Awards reserves the right to let the contract as a whole or separately.

The Board of Awards also reserves the right to reject any or all bids.

GEORGE F. WIEGHARDT,
Highway Engineer,
April 23, 1919. Baltimore, Maryland.

Bids: June 2.

Reinforced Concrete Dam and Bridge

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN SERVICE

Sealed proposals for the construction of a reinforced concrete diversion dam and bridge on the Gila River in Arizona will be received at the office of the Supervising Engineer, United States Indian Service, 528 Federal Building, Los Angeles, Calif., until noon June 2, 1919, and then opened.

The structure will be located about three miles east of Sacaton, Arizona, and 18 miles north of Casa Grande, the nearest railroad station.

The work will require about 31,700 cu.yd. of earth work, 17,740 cu.yd. of concrete, 738,500 lb. of reinforcing steel, 12,400 ft. of round piling, 28,000 ft. of wood sheet piling and eighteen steel gates with operating machinery. Cement, reinforcing steel, round piles, gates and machinery will be furnished by the Government f.o.b. nearest railroad point, hauling to be included in the contract.

All proposals must be made upon blank forms of proposal attached to the contract and specifications which, with the plans, may be obtained upon application to the Supervising Engineer. A deposit of $25 will be required for each set of plans and specifications and this amount will be refunded providing the plans and specifications are returned within ten days after the date on which proposals are to be received.

Detailed schedule of the work to be performed will be furnished bidders and bids should be submitted on all items, as proposals for only a part of the work will not be considered.

HERBERT V. CLOTTS,
Supervising Engineer.

Bids: May 19.

Road Improvements

Tulsa, Oklahoma.

Notice is hereby given that on the 19th day of May, 1919, the Commissioners of Tulsa County, Oklahoma, will receive, open and consider proposals for the grading, paving and otherwise improving the following Tulsa County Roads:

MILES......6..........of SECTION "L"
MILES..1 to 5..inclusive of SECTION "M"
MILES..3 to 5..inclusive of SECTION "I"
MILES..1 to 7..inclusive of SECTION "G"
Part of Mile 8 of Section "E," from East End of Mile 2, Section "I," North 1.3 Miles, Thence East 0.35 Miles to the town of Dawson.

Being a total of approximately 18 miles. Plans, Profiles, Specifications and Estimates are on file in the office of the County Engineer, County Clerk, Court House, Tulsa, Oklahoma, and with the Department of Highways, Capitol Building, Oklahoma City, Oklahoma.

All proposals to be addressed, sealed and delivered to the Board of County Commissioners of Tulsa County, Oklahoma, in care of the County Clerk, on or before two (2) o'clock P.M. of the date above set out. Proposals to be accompanied with a certified check in an amount equal to approximately ten (10%) per cent. of the sum of the bid, drawn on a Bank located in the State of Oklahoma.

The right is hereby reserved to reject any and all bids.

Dated this 7th day of April, 1919.
BOARD OF COMMISSIONERS OF
TULSA COUNTY
By LEWIS CLINE, County Clerk.

U. S. ENGINEER OFFICE, 1st District, Cincinnati, O. Sealed proposals will be received here until 2 p.m., May 6, 1919, and then opened for constructing Lock and Abutment for Dam No. 32, Ohio River, about 5 miles below Vanceburg, Ky. Further information on application.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., at 2 o'clock P.M., May 15, 1919, for furnishing and placing rip rap stone at light stations in the Chesapeake Bay and Potomac River. Information upon application to the above office.

PROPOSALS FOR DREDGING.—U. S. Engr. Office, Old Federal Building, Wilmington, Del. Sealed proposals will be received here until 11 A.M., May 5, 1919, and then opened, for dredging Waterway between Rehoboth Bay and Delaware Bay (Lewes Canal), Del. Further information on application.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

Bids: May 20.

Dam Construction

Stamford, Texas.

Sealed bids will be received by the Mayor and Board of Commissioners of the City of Stamford, Texas, until noon May 20, 1919 and then publicly opened and read, for furnishing all equipment ,tools, labor, materials, etc., necessary for constructing the following:

A dam across the Clear Fork of the Braezs River. The dam contemplated contains approximately nine thousand cubic yards of rubble and concrete masonry, seventy thousand cubic yards earthworth and minor items. A concrete pipe line from river to pumping station (about twelve miles), a cast iron pipe line from pumping station to Stamford (about two miles) and two earthen reservoirs along the pipe line. Plans and specifications for the dam are separate, and either or both sets will be mailed to prospective bidders on receipt of $25.00 for each set, which will be returned only upon their return in good order within two weeks after opening bids. Bids will be considered on all or a part. The right is reserved to reject any and all bids and to waive informalities.

A certified check covering four per cent. of the work bid on must accompany each bid and be made payable to R. L. Penick, Mayor of Stamford, Texas, as an evidence of good faith.

R. L. PENICK, Mayor,
Stmaford, Texas.

Bids: May 9.

Street Improvement

OFFICE OF
THE DIRECTOR OF PUBLIC WORKS

Norfolk, Va.

Sealed proposals will be received at the office of the City Manager until 12 o'clock noon on the 9th day of May, 1919, for improving with sheet asphalt certain streets designated as Class A, aggregating 27,000 sq.yd. and certain other streets designated Class B, aggregating 17,000 sq.yd. including incidental work, in the City of Norfolk, Virginia, at which time and place the same will be publicly opened.

A schedule of the work, specifications and proposal blanks can be had at the Office of Director of Public Works. Bids made on said proposal blanks must be sealed and addressed to Mr. Chas. E. Ashburner, City Manager, marked, "Paving Proposal, May 9, 1919."

A certified check on some local bank in the sum of three thousand ($3000) dollars, payable to B. Gray Tunstall, City Treasurer, or a bidder's bond from well recognized surety company must accompany each bid under the conditions expressed in the proposal.

The right to reject any or all bids is especially reserved or the right to award by classes or in part.

CHAS. E. ASHBURNER,
City Manager.
WALTER H. TAYLOR, 3rd,
Director Public Works.
April 17, 1919.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their big contracts**?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

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In the answers to the foregoing questions you will find unquestionable proof that

1—**Advertised Contracts** are the accepted form of public letting to insure the awarding of contracts free of prejudice.

2—**Advertised Contracts** guarantee the greatest possible saving through maximum competition and that—

3—ENGINEERING NEWS-RECORD is universally recognized as the **one** dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

Bids: May 21.

Road Construction

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Warren for the construction of the Hope-Bridgeville Road, Section No. 3, in the Township of White, in the County of Warren with a reinforced concrete surface; estimated amount of surface pavement required is 10,890 square yards, and opened and read in public at the office of the Board in the Court House at Belvidere, N. J., on Wednesday, May 21, 1919, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bodn for the proposed work, prepared by H. W. eVtter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Amzi H. Lantz, Director, Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a certified check for not less than $1000.0 0and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the oBard of Chosen Freeholders of the County of Warren.

MORRIS S. FAUST, Clerk.

Bids: May 6.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Sealed proposals for building the following:

BALTIMORE CITY, CONTRACT BC-29A: One section of Monroe Street from Eagle Street to Mosher Street, for a distance of 1.18 miles. Sheet asphalt.

CAROLINE COUNTY, CONTRACT Co-18: One section of State Highway between Grove and Bureau, for a distance of 2.50 miles. Concrete.

MONTGOMERY COUNTY, CONTRACT M-17: One section of State Highway through Rockville, for a distance of 1.76 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M., on the 6th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Act of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 21st day of April, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: May 20.

Soil Treatment, Laying Pipe, etc.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chembers Strees, New York City, until 11 A.M. on Tuesday, May 20, 1919, for Contract 190, for soil treatment, furnishing and laying water pipes, building concrete steps and walks and doing miscellaneous work in the vicinity of the Kensico dam, in the Towns of Mt. Pleasant and North Castel, Westchester county, New York, all as set forth in the specifications.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer, at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 8.

Paving

Norfolk, Va.

Sealed proposals will be received at the Office of the City Manager until 12.00 noon on the 8th day of May, 1919, for paving Boush Street from Brooke Avenue to Dartmouth Street with Durax, 6130 square yards, more or less, together with all incidental work designated Class D, No. 6. Also for furnishing material and constructing 10,200 linear feet, more or less, concrete curb and gutter designated Class C. All in the City of Norfolk, Va., at which time and place the same will be publicly opened.

A schedule of the work, specifications and proposal blanks can be had at the Office of Director of Public Works. Bids made on said proposal blanks must be sealed and addressed to Mr. Charles E. Ashburner, City Manager, marked Paving Proposal—May 8, 1919.

A certified check on some local bank in the sum of one thousand dollars ($1000.00) payable to B. Gray Tunstall, City Treasurer, or a bidder's bond from a well recognized Surety Company must accompany each bid under the conditions expressed in the proposal.

The right to reject any or all bids is especially reserved or the right to award by classes or in part.

CHAS. E. ASHBURNER,
City Manager.
WALTER H. TAYLOR, 3rd.,
Director of Public Works.

Bids: May 19.

Sewer

Akron, Ohio.

Sealed bids or proposals addressed to the Director of Public Service, and endorsed, "Proposal for Sewer in East Avenue, from Maple Street to Wooster Avenue," will be received at the office of the Director, Delaware Building, Akron, Ohio, until 12 o'clock noon, Central Standard time (2 o'clock local time) of Monday, the 19th day of May, 1919, and at that time and place will be publicly opened and read.

The work includes:

3900 ft. of vitrified pipe, sizes 12 to 24 in.
4700 ft. of trunk sewer, sizes 30 to 66 in.
35 manholes.

Each proposals must be accompanied by a certified check in the sum of five hundred dollars ($500).

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Plans and specifications on file in the office of the Chief Engineer, or can be obtained upon deposit of five dollars ($5), which deposit will be returned if plans are returned in good condition within ten days after taking of the bids.

The right is reserved to reject any or all bids.

H. S. MORSE,
Director of Public Service.
E. A. ZEISLOFT,
Chief Engineer.

Bids: May 21.

Road Machinery

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 a.m., May 21, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for Road Machinery to be used for Maintenance Work of the Department. Bidding blanks and specifications may be obtained free upon application to the State Highway Department, Harrisburg, Pa.

LEWIS S. SADLER.
State Highway Commissioner.

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Swart deals with reliable contractors only—it is unnecessary to exaggerate about them to secure their Contract Bonds.
You have what I require—Dependability. I have what you need—an engineering service.
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ON YOUR NEXT BOND
Phone—Wire—Write
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19 Liberty Street, New York

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its worth-while contractor in this country who bids on public work outside his own city. Searchlight Section is read each week by nearly every

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

OFFICIAL PROPOSALS

Bids: May 14.

Road Construction

Atlantic City, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of Atlantic County, N. J., at Freeholders Meeting Room, 523 & 524 Guarantee Trust Bldg., Atlantic City, N. J., at 11 A.M. on May 14th, for the reconstruction of two sections of Mays Landing-Pleasantville Road in the Townships of Hamilton and Egg Harbor in the County of Atlantic and State of New Jersey with a bituminous concrete surface upon a concrete foundation; estimated amount of surface pavement required is 44.249.1 square yards, of foundation 44,249.1 square yards; and opened and read in public at the aforesaid time and place.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by A. H. Nelson, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Atlantic City, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, baring th name and address of bidder and name of road on the outside, adderssed to The Board of Chosen Freeholders of Atlantic County, N. J., and must be accompanied by the name and certificate of proposed surety and a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders, Atlantic County, N. J.

F. W. WILLETTS,
Clerk.

U. S. ENGINEETR OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 9, 1919, and then opened for furnishing Rock Crushers. Further information on application.

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., April 26, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 6, 1919, for the construction of the United States Post Office at Bellefourche, South Dakota. Drawings and specifications may be obtained from the Custodian of the site at Bellefourche, South Dakota, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: May 29

Reservoir

BOROUGH OF TAMAQUA
OFFICE OF THE COMMISSIONERS OF
WATER WORKS.
Tamaqua, Pa.

Sealed proposals will be received by the undersigned at their office in Tamaqua, Pa., until 12 o'clock noon of May 29, 1919, at which place and hour they will be publicly opened and read, for the construction of a reservoir on Owl Creek, in Rahn Township, Schuylkill County, for the Borough of Tamaqua.

The construction will involve about 57,000 cu.yd. of embankment and about 2000 cu.yd. of concrete, mass and reinforced.

Proposals must cover the entire construction, and the necessary labor and materials for same.

The right is reserved to reject any or all proposals and to readvertise and award the contract in the regular manner.

Plans and specifications may be seen at the office of the Commissioners of Water Works at Tamaqua; or they may be obtained from the Commissioners on payment of $3, which will be refunded upon return of plans and specifications in good condition.

Every proposal must be accompanied by a money deposit in the form of a draft or certified check, payable to the Borough of Tamaqua, for $2000.

The successful bidder will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them, or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the draft or certified check will be returned to the bidder.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of security required for faithful performance of the work will be 10 per cent. of the amount of the estimated cost of the work according to the contract price.

COMMISSIONERS OF WATER WORKS,
Borough of Tamaqua, Pa.
JOHN M. HARRIS,
Secretary.

Bids: May 15.

Ornamental Street Lighting System

Mandan, North Dakota.

The Board of City Commissioners will receive sealed bids, at the office of the City Auditor, Mandan, N. D., until eight o'clock P.M., May 15, 1919, for the furnishing of all material including plant equipment and labor for the installation of an ornamental street lighting system.

The work to be done embraces approximately 80 blocks, with 294 posts.

Each proposal shall be accompanied by a certified check of $500 and a bond running to the city in a sum equal to 5% of the amount of the bid.

Plans and specifications are on file with the City Auditor or may be obtained from the engineers by depositing $5.

The right is reserved to reject any or all bids.

H. L. HENKE,
Pres. City Commission.
W. H. SEITZ, City Auditor.
BLACK & GRIFFIN, Engineers.

OFFICIAL PROPOSALS

Bids: May 15.

Street Improvements

Cumberland, Md.

Sealed proposals addressed to the Mayor and City Council of Cumberland, Md., and endorsed "Proposals for the paving and otherwise improving streets in the City of Cumberland, Md.," will be received at the office of the City Clerk on or before 9:30 A.M., May 15, 1919. Plans and specifications may be obtained at the office of the City Engineer. A deposit of one dollar ($1) for each plan will be required, which will be refunded upon the return of same in good condition. Specifications will be furnished free of charge to each bidder receiving one or more plans.

This work embraces curbing, paving and otherwise improving on eight (8) streets, aggregating approximately, as follows:

9,135	ft. concrete curbing.
7,050	sq.yd. concrete paving.
930	sq.yd. wood block paving.
14,200	sq.yd. brick paving (semi-monolithic) and miscellaneous sewer work, etc.

Alternate bids will be asked on 11,280 sq.yd. of Sheet Asphalt on part of the above mentioned paving.

Each proposal must be accompanied by a certified check drawn to the order of the Mayor and City Council of Cumberland, Md., amounting to one hundred dollars ($100) for each and every street bid on, which check will be forfeited to the Mayor and City Council of said City as liquidated damages in case an award is made and the contract and bond are not promptly and properly executed. The Mayor and City Council reserve the right to reject any or all bids, and further, to contract for all or any part of said work.

RALPH L. RIZER, City Engineer,
City Hall, Cumberland, Md.

Bids: May 21.

Road Machinery

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 a.m., May 21, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for Road Machinery to be used for Maintenance Work of the Department. Bidding blanks and specifications may be obtained free upon application to the State Highway Department, Harrisburg, Pa.

LEWIS S. SADLER,

Bids: May 8, 1919.

Paving

Cohoes, N. Y.

Sealed proposals will be received on the 8th day of May, 1919, at 2 P.M., in the Mayor's office, City Hall, Cohoes, N. Y., for the paving of Manor Avenue, from the intersection of Reservoir Street to City line. Brick, bithulitic, concrete, tarvia or bituminous material. Certified check for 10% of amount of bid must accompany proposal. Successful bidder must file bond for 50% of total amount of contract.

EUGENE M. HEBERT,
Secretary.

U. S. ENGINEER OFFICE, New London, Conn.—Sealed proposals for dredging in Greenwich Harbor, Conn., will be received here until 2 o'clock p.m., May 28, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: May 15.

Paving

Lebanon, Pa.

Sealed proposals directed to the City Clerk of Lebanon, Pa., will be received at the City Hall until 5 P.M., Thursday, May 15, and publicly opened at a special Council meeting that same evening, for the furnishing of all labor and materials required to construct the following pavements

Cumberland Street—4th St. to 5th St., approximately.....	1,500 sq.yds.
Cumberland Street—9th St. to Pennsylvania R.R. approximately	4,600 " "
Cumberland Street—Pennsylvania R.R. to 16th St. approximately	9,000 " "
Chestnut Street—4th St. to 12th St. approximately....	16,700 " "

Alternate bids will be received on Woodblock, Vitrified Brick, Cement Concrete, Asphaltic Concrete and Sheet Asphalt. The Contractor may bid on any or all of these different types of surfacing.

Certified check of $250, $700, $1500, $2500 respectively, must accompany each bid.

Specifications, proposal blanks and detailed information concerning the condition and manner of submitting bids can be obtained by applying to the City Engineer. A deposit of $5.00 is required for each complete set of the specifications sent out. This will be refunded upon the return of the specifications in good condition.

Payment for the work done in paving the street intersections and in all drainage structures will be by monthly estimates. Payment for all other work will be made by two-year improvements bonds of the City of Lebanon, bearing 6 per cent. interest. The security for the payment and redemption of these bonds is the assessment levied against the abutting property owners as provided for by an act of Assembly entitled, "An act providing for the Incorporation of 3rd Class Cities" approved May 23, 1889, and any supplements thereto which may be applicable.

Plans of streets and standard structures may be seen at the City Engineer's office.

The Mayor and Council reserve the right to reject any or all bids and to award the contract as is deemed to the best interest of the City of Lebanon.

PAUL A. VOLCKER,
City Engineer.

Attest:
DAN M. SHARP,
City Clerk.

Bids: May 19.

Concrete and Brick Paving

Plainfield, N. J.

Sealed proposals will be received by the Common Council of the City of Plainfield, N. J., at the Council Chambers in said City on Monday, May 19th, 1919, at 8 P.M., for paving certain streets with reinforced concrete and certain other streets with vitrified brick on concrete base.

The approximate amount of the principal items of the work is as follows:

14,700	Sq.Yds. of vitrified brick pavement.
2,300	Cu.Yds. of cement concrete pavement.
9,400	Lin.Ft. of concrete abuttements in place of curbs.

Plans, specifications and forms of proposals, contracts, etc., may be had of **Andrew J. Gavett, City Engineer, or of John J. Carroll, City Clerk, Municipal Building, Plainfield, N. J.**

JOHN J. CARROLL,
City Clerk.

Bids: May 12.

Paving

CITY OF ONEONTA, NEW YORK.
DEPARTMENT OF PUBLIC WORK.

Sealed bids or proposals will be received by the Board of Public Works, at the City Clerk's Office, at Oneonta, New York, until 8 P.M., on the 12th day of May, 1919, for the improvement named below, at which time and place such proposals will be publicly opened and read.

Paving with bituminous macadam, Maple Street from Main Street to south line of Center Street; Maple Street from south line of Center Street to Normal School Grounds; Elm Street from Main Street to Cedar Street and Spruce Street from Elm Street to Maple Street, together with such sewer constructions as is necessary for the paving.

All bids must be made on the regular printed forms furnished for that purpose, and all prices must be plainly stated in ink, both in wards and figures.

Plans and specifications are on file in the City Engineer's office and may be obtained for the price of five dollars ($5), said five dollars will not be refunded upon return of the plans, but will be retained by the City of Oneonta as a part compensation for the printing of the same.

All bids will be considered informal, which do not contain prices set opposite each and all of the items which enter into the construction of the particular kind of pavement bid upon, and which are called for in the printed forms for bids, or which are otherwise not in conformity with this notice.

No bid shall be allowed to be withdrawn for any reason whatever, after it has been presented to the Board of Public Works.

No bid shall be accepted from, or contract awarded to any person who is in arrears to the City of Oneonta upon debt or contract, or who is in default as surety or otherwise, upon any obligation to said city.

All bids which, in the opinion of the Board of Public Works, are unbalanced will be deemed informal.

Bidders are required to state in their bids their names and places of residence, and the names of all persons interested with them in said bids. Also that the bid is made without any connection with any persons making another bid for the same contract, and that the bid is in all respects fair and without collusion of fraud.

A certified check in an amount equal to at least five (5%) per cent. of the bid, payable to the Chamberlain of the City of Oneonta, will be required to accompany each bid. All such deposits, except that of the bidder whose bid shall have been accepted, will be returned to the person or persons making the same within three days (3) after the execution of the contract. If the bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within fifteen (15) days after the notice that it has been awarded to him or them, the amount of the deposit made by him or them will be forfeited to and retained by the City of Oneonta as liquidated damages for such neglect or refusal. But if he or they shall execute the contract within the time aforesaid, the amount of his or their deposit will be returned to him or them.

No contract will be considered unless accompanied with a surety bond in an amount equal to fifty (50%) per cent. of the bid, approved as to sufficiency by the Board of Public Works, and conditioned that if the contract be accepted, the proposer will construct the work at the prices and upon the terms proposed, according to the plans and specifications, and subject to the supervision and approval of the City Engineer, and also conditioned for the faithful performance of all the provisions of the contract.

The Board of Public Works reserves the right to reject any or all bids not deemed for the interest of the City.

The Engineer's estimate of quantities, as attached to the bidding form, will be used only as a basis of computing and canvassing the various bids.

Bidders are required to form their own judgment of the quantities and character of the work by personal examination of the ground where it is to be done and of the specifications and the drawings relating to it, or by such other means as they may prefer.

Bidders must not assert any misunderstanding in regard to any thing relating to the work, or the location and ground where it is to be executed.

BOARD OF PUBLIC WORKS,
CITY OF ONEONTA
SHELDON H. CLOSE,
City Clerk.

Bids: June 2.

Reinforced Concrete Dam and Bridge

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN SERVICE

Sealed proposals for the construction of a reinforced concrete diversion dam and bridge on the Gila River in Arizona will be received at the office of the Supervising Engineer, United States Indian Service, 528 Federal Building, Los Angeles, Calif., until noon June 2, 1919, and then opened.

The structure will be located about three miles east of Sacaton, Arizona, and 18 miles north of Casa Grande, the nearest railroad station.

The work will require about 31,700 cu.yd. of earth work, 17,740 cu.yd. of concrete, 738,500 lb. of reinforcing steel, 12,400 ft. of round piling, 28,000 ft. of wood sheet piling and eighteen steel gates with operating machinery. Cement, reinforcing steel, round piles, gates and machinery will be furnished by the Government f.o.b. nearest railroad point, hauling to be included in the contract.

All proposals must be made upon blank forms of proposal attached to the contract and specifications which, with the plans, may be obtained upon application to the Supervising Engineer. A deposit of $25 will be required for each set of plans and funded providing the plans and specifications are returned within ten days after the date on which proposals are to be received.

Detailed schedule of the work to be performed will be furnished bidders and bids should be submitted on all items, as proposals for only a part of the work will not be considered.

HERBERT V. CLOTTS,
Supervising Engineer.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals for maintenance dredging in New Haven Harbor, Conn., will be received here until 2 o'clock p.m., May 20, 1919 ,and then opened. Information on application.

Bids: May 20.

Mill Creek Flood Control Project

Erie, Pa.

Sealed proposals will be received by the City Council of the City of Erie, Pa., until 10:30 A.M. (Standard Eastern time), Tuesdays, May 20, 1919, for the completion of the Mill Creek Flood Control Project. Three separate contracts will be let, involving the following major items of work, covering about 8000 lin.ft. of reinforced concrete conduit and intake works.

SECTION NUMBER 3	
Earth and shale Rock excavation	95,000 yds.
Reinforced concrete	19,000
SECTION NUMBER 4	
Earth and shale rock excavation	73,000 yds.
Reinforced concrete	17,000
SECTION NUMBER 5 (Intake)	
Earth and rock excavation	25,000
Concrete, plain and reinforced	2,000

Information for bidders, plans, specifications, and contract, for all three contracts, may be obtained on or about May 1, upon the deposit of $25, by addressing Gannett, Seelye and Fleming, Consulting Engineers, 204 Locust St., Harrisburg, Pa., or their Erie Office, 507 Palace Hardware Bldg. Deposit will be returned upon the delivery of the plans and specifications in good condition.

The appropriation for this work is $1,000,000.

THEODORE EICHHORN,
Com. of Streets and Public Improvements.
FAULKNER G. LYNCH, City Engineer.
GANNETT, SEELYE and FLEMING,
Consulting Engineers,
Harrisburg and Erie, Pa.

Bids: May 13.

Sewer Bonds For Sale

Frederick, Okla.

The City of Frederick, Okla., will offer for sale on Tuesday evening, May 13, 1919 (subject to approval of the property owners of said City at a special election to be called immediately thereafter), one hundred and fifty thousand ($150,000) dollars more or less of 30-year Sanitary Sewer Bonds. The Mayor and Council reserve the right to reject any or all bids.

D. W. WOMACK,
City Clerk.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater at Calumet Harbor, Ill. and Ind. Further information on application.

SEALED PROPOSALS will be opened by the Lighthouse Superintendent, Philadelphia, Pa., at 2 o'clock P.M., May 26, 1919, for furnishing rip rap and for building mud banks at Baker Range Front Light Station, Delaware River, Del. Information upon application to the above office.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

Notice is hereby given that sealed **bids will be received** by the State Highway Commission **of** New Jersey, for the improvement **of the following:**

State Highway Route No. 4, Section IA. Concrete Surface, estimated 1400 square yards. Monmouth County.

State Highway Route No. 3, Da Costa-Hammonton Section. Concrete Surface, estimated 46,658 square yards. Atlantic County.

Bids will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Building, Trenton, N. J., on Wednesday, May 14, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond, for the proposed work are on file in the office of the said Department at Trenton, N. J., and in the office of J. A. Williams, Division Engineer, 503 Market Street, Camden, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein, and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Concrete Bridge Construction

Montgomery, Ala.

Sealed bids will be received by the Board of Revenue of Montgomery County, Alabama, until noon, Monday, June 9, 1919, and at that time publicly opened for the construction of a reinforced concrete bridge, one thousand two hundred and eighty-eight feet long, with an eighteen foot roadway, over Catoma Creek on the Norman Bridge Road, five miles south of Montgomery.

A certified check for four hundred dollars will be required to accompany each bid. Plans and specifications are on file in the office of the State Highway Engineer and the County Engineer, Montgomery, Alabama. The right is reserved to reject any or all bids.

W. S. KELLER,
State Highway Engineer,
Montgomery, Alabama.

OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., May 1, 1919. Sealed proposals will be received at the office of the Secretary to the Board of Commissioners, Room 511, District Building, until 2 o'clock P.M., Wednesday, May 21, 1919, for paving various streets and avenues in the District of Columbia with sheet asphalt. Forms of proposal, specifications, together with necessary information may be obtained from the Chief Clerk of the Engineer Department, Room 427, District Building. Louis Brownlow, W. Gwynn Gardiner, Charles W. Kutz, Commissioners, D. C.

Ore Stripping

Americus, Ga.

Work consists of 500,000 to 1,500,000 yards of materials varying in thickness from 30 to 70 feet. Work should preferably be done by a large shovel or drag line so that the ore can be mined by the company as rapidly as it is uncovered by the contractor. Mines located about five miles from Central Railroad of Georgia near Americus, Ga. For further information apply to E. S. Fickes, Chief Engineer, Aluminum Company of America, 2400 Oliver Bldg., Pittsburgh, Pa.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany, N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Thursday, the 15th day of May, 1919, for the completion of the following highways:

Cattaraugus...Three highways: 6.88, 4.73 and 2.17
Chautauqua...One highway: 3.90
Delaware......One highway: 6.51
Erie..........One highway: 5.19
Montgomery...Two highways: 2.49 and 1.61
Nassau........Three highways: 4.98, 3.09 and 3.38
Niagara.......One highway: 7.79
Onondaga.....One highway: 5.55
Orange........One highway: 9.18
Ulster.........One highway: 3.17
Wayne........One highway: 3.97

Also for the construction of the following highways:

Onondaga.....One highway: 3.94
Rensselaer....One highway: 3.80

And also for the repair of the following highways:

Columbia......One contract, reconstruction
Livingston.....One contract, reconstruction
Montgomery...One contract, reconstruction
Niagara........One contract reconstruction
Orange........Two contracts, reconstruction and resurfacing
St. Lawrence..One contract, resurfacing
Steuben.......One contract, resurfacing
Westchester...Four contracts, reconstruction

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose divisions the roads to be completed are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
R. K. FULLER,
Secretary.

Road Work

Pineville, W. Va.

Sealed proposals will be received by the County Court of Wyoming County, until 1 o'clock P.M. on May 14, 1919, for the construction and completion of one section of earth road leading from Elmore Yards, at the mouth of Barkers Creek, up said Creek to the mouth of Gooney Otter, a distance of approximately four miles, and consisting of approximately 40,000 cu.yd. of excavation, 500 cu.yd. of random rubble masonry, 400 cu.yd. of concrete, and 100 yd. of dry random rubble retaining walls.

Work consists of grading and construction of bridges and small drainage structures to be done in accordance with the specifications and plans of the State Road Commission on file in the Engineer's office in the town of Pineville, West Virginia, and the contract to be executed by the successful bidder, as well also as the proposal for said work shall be on the forms now adopted and used by the State Road Commission.

All bids must be accompanied by a certified check for five per cent. of the total amount of the bid, and the bid must be securely sealed and filed with the Clerk of the County Court of Wyoming County, West Virginia, at his office in the town of Pineville, West Virginia, on standard form of proposal furnished with specifications which said proposal and specifications shall be those that are adopted as the standard proposal and specifications used by the State Road Commission.

The Court reserves the right to reject any and all bids for said work.

Dated at Pineville, West Virginia, this the 8th day of April, 1919, by order of the Court.

(Signed) WILL P. COOK, Clerk

Sanitary Sewer

Frederick, Oklahoma

Sealed bids addressed to the "Honorable Mayor and Council" of the City of Frederick, Oklahoma, and endorsed "Sewer Bid" will be received at the office of the City Clerk until 4 P.M., May 13th, 1919, at which time they will be publicly opened and read

The work consists of furnishing labor and material for the construction and extension of a sanitary sewer system.

Approximate quantities as follows:

Trench excavation 5′ to 17′ deep, Cu.Yds.	26,775
6″ Vitrified pipe, Lin.Ft.	965
8″ " " " "	34,795
12″ " " " "	1,780
15″ " " " "	7,770
Specials	1,032
Manholes	86

Alternate bids will be received for Cement Sewer Pipe in place of vitrified pipe.

Each proposal must be accompanied by a certified check on a Frederick bank for 5% of amount bid.

Plans and specifications are on file at the office of the City Clerk, and copies of same may be obtained from the Engineer upon payment of $15.00 therefor.

The City reserves the right to reject all bids, or accept any that may seem best for the City.

D. W. WOMACK, City Clerk.

Bridge Construction

Mandan, N. D.

Sealed proposals will be receive at the Morton County Court House of Mandan, North Dakota, for the preliminary survey, soundinds, barrings, design and estimate of cost necessary for the submittal to the Secretary of the U. S. Department of Agriculture of a Federal Aid Project statement by the North Dakota State Highway Commission for the construction of a bridge across the Missouri River between Bismarck and Mandan, will be received by the County Boards of Commissioners of the County, Mr. Burleigh and Morton on joint session at the Morton County Court House at Mandan, N. D., not later than 2 P.M. of the 19th of May, 1919. Work to be begun not later than June 1, 1919. The work as above outlined is to be executed to the satisfaction of the North Dakota State Highway Commission.

Each bidder must acompany his proposal with a statement regarding his ability, experience and equipment for carrying out the above work. The right is reserved to reject any or all bids.

LEE NICHOLS, County Auditor.

OFFICIAL PROPOSALS

Bids: May 26.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., May 26, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 13,623 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Blair County: 32,229 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Butler County: 11,065 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Cameron County; 26,648 ft. of Reinforced Concrete and Hillside Vitrified Brick in Clarion County; 4984 ft. of Reinforced Concrete in Clinton County; 16,552 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Crawford County; 33,917 feet of Bituminous Concrete Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Dauphin County; 53,372 ft. of Reinforced Concrete in McKean County: 17,891 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 10,554 ft. of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 13,464 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Union County; 9550 ft. of Reinforced Concrete in Venango County; 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren County; 27,688 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Wayne County and 2085 ft. of Reinforced Concrete in Westmoreland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

Bids: June 2.

Road Work

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Saturday, June 2, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph Co., to be let in Sections. Said work having been heretofore let to Contract to the E. M. Hudson Paving and Construction Co. and not completed by it. A Certified check in the sum of $500.00 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

OFFICIAL PROPOSALS

Bids: May 20.

Concrete Pavement

Town of Nutley, N. J.

Sealed bids for constructing concrete pavement on Park Ave. from Passaic Ave. to Washington Ave. will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., May 20th, 1919, at which time they will be publicly opened and read by the Board of Commissioners. The principal items of the work are approximately as follows:

7800 sq.yds. of concrete pavement, 8" thick in the center and 6" thick at the sides.
1600 lin.ft. of bluestone curb reset in concrete.
3500 lin.ft. of integral concrete curb.

Pamphlets containing Information for Bidders, Forms of Proposal and Agreement, and Specifications, can be obtained from the Town Engineer or Town Clerk on pawment of $1.00 which will be refunded on the return of the pamphlet in good condition.

A certified check for $3000 must accompany each bid and a bond for the total amount of the contract will be required for the faithful performance of the contract.

EMIL DIEBITSCH,
Mayor and Commissioner of Streets
and Public Improvements.
ELIOT N. SMITH,
Town Engineer.
THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for Concrete, Macadam, Tarvia, Warrenite and Asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: May 27.

Steel and Concrete Bridge Construction

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P.M., May 27, 1919, for the construction of the following bridges:

4—50 ft. steel plate girder spans: width 18 ft., with alternate bids on steel truss spans of same length and width.
2—50 ft. steel truss spans: width 16 ft.
400 lin.ft. concrete viaduct: width 18 ft.
112 lin. ft. I-beam spans; width 16 ft.
Reinforced concrete culverts; 95 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnisned on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT
DISTRICT,
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffiin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Griffiin, Georgia
G. M. HARRINGTON,
City Engineer, Griffiin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

Bids: May 19.

Paving and Sewers

Thermopolis, Wyo.

Sealed proposals will be received by the Town Clerk until 6 o'clock P.M., May 19, 1919, for the construction of paving and storm sewers in Paving District No. 1.

The work includes about:

7,600 lin.ft. concrete curb.
26,000 sq.yd. pavement.
5,000 lin.ft. storm sewers and laterals.

Proposals will be received on the following types of pavement: Sheet asphalt, asphaltic concrete, bitulithic, reinforced concrete, brick.

A certified check for 10% of the amount of the bid must accompany each bid.

Plans, specifications and forms of contract and bond may be obtained by addressing J. B. Chessington, Town Engineer, Thermopolis, Wyo., and depositing $10, which will be refunded upon their return in good condition.

A. J. LOWRY,
Town Clerk

OFFICIAL PROPOSALS

Bids: May 20.

Street Paving

OFFICE OF THE BOARD OF COMMISSIONERS

Nashville, Tenn.

Notice is hereby given that sealed proposals will be received at the office of the Secretary of the Board of Commissioners until 10 o'clock A.M., Tuesday, May 20, 1919, for the construction of certain Bitulithic Paving under Special Benefit Improvement Ordinances Nos. 102, 103, 104, 105; certain Asphaltic Concrete Paving under Special Benefit Improvement Ordinance No. 106; certain Recut Granite Block Paving under Special Benefit Improvement Ordinances Nos. 107, 108, 109, 110, 111, 112; certain Wood Block Paving under Special Benefit Improvement Ordinances Nos. 113, 114; and certain Macadam Paving (Oil and Gravel Surface Treatment) under Special Benefit Improvement Ordinance No. 115.

Separate proposals must be submitted for each street and must be on blank forms accompanying specifications, which will be furnished by William W. Southgate, City Engineer, upon request. Proposals must be accompanied by a certified check or cashier's check of a national bank located in Nashville, Tenn., payable to the order of the Board of Commissioners, in an amount equivalent to 10 per cent. of the aggregate bid, or an approved bond in the penal sum of a like amount with at least two good solvent sureties, who are citizens or residents of Nashville, Tenn., or in lieu of personal sureties, the bond of some surety company authorized to execute such a bond in the State of Tennessee. The said checks or bonds will be returned to unsuccessful bidders upon award of contracts, and to successful bidders when they shall have entered into contract and made approved bond for the faithful performance of said contract as required by law. A deposit of $5 will be required to accompany each application for specifications, and which will be returned to the depositor either upon the filing of bids or upon the return of the specifications. The right is reserved to reject any and all bids.

By order of the Board of Commissioners.
WM. GUPTON, Mayor.
Attest:
J. W. DASHIELL, Secretary.

Motor Truck, Hook and Ladder, Etc.

Milville, N. J.

The City of Millville, N. J., invites proposals for one combination two-in-one chemical fire and hose gasoline motor truck; also one gasoline motor driven hook and ladder truck with one nickel plated chemical tank. Detailed specifications will be mailed upon application to Samuel D. Bennett, Director of Public Safety, Millville, N. J.

PROPOSALS FOR **JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.**

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in the Narrow of Lake Champlain, N. Y., and Vermont, will be received here until 12 m., May 12, 1919, and then opened. Further information on application.

OFFICIAL PROPOSALS

Bids: May 13.

Road Work

Madisonville, Ky.

Sealed bids will be received by the Hopkins County Fiscal Court at the Office of John G. Salmon, County Court Clerk, Madisonville, Ky., until 1:30 P.M., on May 13, 1919, at which time bids will be publicly opened, for the improvement of 1½ miles of the Madisonville-Princeton Road, State Aid No. 54E 2, and 1½ miles of the Madison-Greenville Road State Aid No. 54B 2.

Approximate Estimate Madisonville-Princeton Road.

6000 Cu.Yds. Earth Excavation.
50 Cu.Yds. Rock Excavation.
112 Lin.Ft. C. IP.
40 Cu.Yds. Concrete.
1 Acre Grubbing.
3950 Cu.Yds. Crushed Stone for water bound macadam surfacing.

Approximate Estimate Madisonville-Greenville Road.

3950 Cu.Yds. Crushed Stone for water bound Macadam Surfacing.

For the information of those wishing to bid on this work, will state that Two miles of State Aid work will be let in the near future. Also 5½ miles of Federal Aid work is being surved, and will be constructed this year.

Plans and Specifications on file in the County Road Engineers Office, Madisonville, Ky., and in the Office of the Commissioner of Public Roads, Frankfort, Ky., which may be inspected by bidders.

A certified check of $500.00, made payable to J. B. Stanley, Treasurer of Hopkins County, shall be filed with each bid.

The Fiscal Court of Hopkins County reserves the right to reject any or all bids.

HOPKINS COUNTY FISCAL COURT
By R. C. GIFFIN,
County Road Engineer.

Bids: May 12.

Road Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Road Committee of the Board of Chosen Freeholders of the County of Salem for the reconstruction of Penn Grove-Pennsville Road, Second Section, in the townships of Upper Penns Neck and Lower Penns Neck, in the County of Salem, with a concrete surface; estimated amount of surface pavement required is 10,400 sq.yd., and opened and read in public at the Court House in Salem, N. J., on May 12, 1919, at 11 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Keasbey, County Engineer, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to the Road Committee of the Board of Chosen Freeholders of the County of Salem and must be accompanied by a certified check for not less than $1000 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By Order of the Board of Chosen Freeholders of the County of Salem.

I. C. SMASHEY,
Clerk.

OFFICIAL PROPOSALS

Bids: May 21.

Road Construction

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Warren for the construction of the Hope-Bridgeville Road, Section No. 3, in the Township of White, in the County of Warren with a reinforced concrete surface; estimated amount of surface pavement required is 10,890 square yards, and opened and read in public at the office of the Board in the Court House at Belvidere, N. J., on Wednesday, May 21, 1919, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bodn for the proposed work, prepared by H. W. eVtter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Amzi H. Lantz, Director, Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a certified check for not less than $1000.0 0and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the oBard of Choser Freeholders of the County of Warren.

MORRIS S. FAUST, Clerk.

Bids: May 20.

Soil Treatment, Laying Pipe, etc.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chembers Strees, New York City, until 11 A.M. on Tuesday, May 20, 1919, for Contract 190, for soil treatment, furnishing and laying water pipes, building concrete steps and walks and doing miscellaneous work in the vicinity of the Kensico dam, in the Towns of Mt. Pleasant and North Castel, Westchester county, New York, all as set forth in the specifications.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Principal Assistant Engineer, at the above address.

JOHN F. GALVIN, President.
CHARLES N. CHADWICK.
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

PROPOSALS FOR DREDGING. **U. S. Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application.**

Bids: May 20.

Highway Work and Sewers

Johnstown, Pa.

Sealed proposals will be received at the office of the Superintendent of Streets and Public Improvements, City Hall, Johnstown, Pa., until 12 o'clock noon of Tuesday, May 20, 1919, for curbing, grading and paving the following highways, also sanitary sewers, storm sewers and their appurtenances, all in accordance with plans and specifications on file in the office of the City Engineer:

CONTRACT NO. 1

Buck Avenue and Solomon Street from Bedford Street to City Line:

Brick Paving, 9090 sq.yds.
Storm Sewer and appurtenances, 947 lin. ft. 12" to 36"
Sanitary Sewer and appurtenances, 4015 lin.ft. 8"

CONTRACT NO. 2

Ridge Avenue from Horrocks Street to end of Avenue:

Brick Paving, 1540 sq.yds.
Storm Sewer and appurtenances, 732 lin. ft. 8" to 15"
Sanitary Sewer and appurtenances, 828 lin.ft. 8"

Church Avenue from Angle in Avenue to end of Avenue:

Brick Paving, 1628 sq.yds.
Sanitary Sewer and appurtenances, 726 lin.ft. 8"

CONTRACT NO. 3

Section No. 3 Sanitary Sewer Main and its appurtenances from Hagen Street to Tenth Avenue:

1657 lin.ft. 63"
2336 " " 60"
4 " " 54"

Conemaugh River Siphon:

2 siphon chambers, emergency outfall chamber, 2 lines 39" R. C.
Pipe each 350 lin.ft. and Elk Run auxiliary siphon.

Plans, specifications, and blank proposals can be obtained at the office of the City Engineer on payment of $3 for each set or contract, which will be refunded upon the day of the letting to those submitting bids, returned in good condition.

Each proposal must contain the full name providing the plans and specifications are of the party or parties presenting the same and all persons interested therein; and must be accompanied by a bond, duty and legally executed, for an amount which shall be not less than five (5%) per cent. of the contract price, or a certified check for like amount, on a solvent bank doing business in the City of Johnstown, Pa., and made payable without reservation to the order of the Treasurer of the City of Johnstown, Pa., as a guarantee that if the proposal be accepted a contract will be entered into.

All proposals must be made on the blank forms attached to the specifications, as none other will be accepted, and they shall be enclosed in an envelope bearing the name and address of the bidder, marked "Proposal for Highway Improvements" and addressed to "The Superintendent of Streets and Public Improvements.' Bids will be opened and publicly read at the regular session of City Council in their chambers at 2 o'clock p.m. on the same date.

The city reserves the right to reject any or all bids, to waive irregularities, and to award the contract as may be deemed to the best interests of the city.

M. LEE MASTERTON,
Supt. of Streets and Public Improvements.

Bids: May 26.

Street Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the City of Salem for the reconstruction of Streets in the City of Salem in the County of Salem, N. J., as follows:

Macadam Foundation	4,366 Sq.Yds.
Repaired Macadam Foundation	33,924 " "
Bituminous Macadam Penetration Surface	38,290 " "
Repaired Bituminous Concrete	14,177 " "

and opened and read in public at Council Chamber (Liberty Fire Engine House), Salem, N. J., on Monday, May 26, 1919, at 8 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasby & Sparks, Engineers, and approved by the State Highway Commission, have been filed in the office of the said engineers at Salem, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Mayor and Common Council of the City of Salem, N. J., and must be accompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Mayor and Common Council of the City of Salem, N. J.

(Signed) WM. B. DUNN, Recorder.

Bids: May 15.

Sewer System Extensions

OFFICIAL NOTICE NO. 40
PUBLISHED BY AUTHORITY OF THE SEWERAGE COMMISSION OF THE CITY OF MILWAUKEE

Milwaukee, Wis.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of said City at its offices in the City Hall until 2 P.M., the 15th day of May, A. D. 1919, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the building of the following work:

28 Intercepting and Regulating Structures.

Together with all connections to existing sewers, and other appurtenances.

The time allowed for the completion of this contract will be twelve (12) months from the date of the engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated, shall, for each day in excess thereof, be fifty (50) dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of five thousand dollars ($5000).

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Sewerage Commission after the contract has been awarded, or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and Sewerage Commission.

Specifications and blank forms of proposals can be obtained, and detailed plans examined, at the office of the Sewerage Commission in the City Hall and a full set of plans will be sent to any contractor upon receipt of five dollars ($5). This sum will be returned upon surrender of the plans in good condition.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES,
Secretary.

Countersigned

A. P. PUELICHER, Deputy Comptroller.

Bids: May 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction of the following sections of State highway will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Friday, May 16, 1919, at which time they will be opened and read in public.

1. East Main Road, Portsmouth, 9297 feet—bituminous macadam.
2. Waterman Avenue, East Providence, 8180 feet—cement concrete.
3. Hartford Pike, Johnston and Scituate, 10,560 feet—bituminous concrete.
4. Mendon Road, Lincoln, 3550 feet—cement concrete.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, May 7, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODWARD

Bids: May 29.

Street Improvement

Las Vegas, New Mexico.

Separate sealed proposals for the paving and improving of the following streets within the City of Las Vegas, New Mexico, will be received at the office of the City Clerk until 8:00 o'clock P.M., May 29th: National Street from Sixth Street to Twelfth Street; Sixth Street from Main Street to Friedman Avenue; Seventh and Eighth Streets from Douglas Avenue to Friedman Avenue. All proposals must be upon blanks furnished by the City and must be accompanied by a certified check on some solvent bank in the sum of $1000.00 and made payable to the City Treasurer. Approximate quantities as follows: Concrete, Topeka or Bitulithic pavement, 52,777 Sq.Yds.; Concrete curb and gutter, 22,713 lin.ft.; concrete alley return, 528 lin.ft., which is approximately one-half of a two-year program which has been authorized. Alternate bids will be received based upon the acceptance, at par, for all work of certificates bearing 6% interest and of certificates bearing 8% interest. Payments will be made in assessment certificates upon the completion of each separate street improvement. Plans can be seen and forms of proposal obtained at the office of Vincent K. Jones, Consulting Engineer, East Las Vegas, N. M. No informal or conditional bid will be considered. The right is reserved to reject any or all bids.

City Council of the City of Las Vegas, N. M.
By F. O. BLOOD, Mayor
ATTEST:
W. G. BENJAMIN, Clerk.

Bids: May 22.

Sewage Treatment Works

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control until 1 P.M., May 22, for the construction of Sewage Treatment Works for the Weston State Hospital, Weston, W. Va. The work contemplated comprises the construction of a sewage pumping station equipped with two electric motors, 2 centrifugal pumps and automatic control equipment. Also the construction of a sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant. Copies of plans and specifications and blank proposals may be examined or obtained at the office of J. S. Lakin, Member, State Board of Control, Charleston, W. Va., or at the office of Charles E. Collins, Consulting Engineer, Drexel Building, Philadelphia.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which deposit will be refunded upon the return of the plans and specifications in good condition. Each proposal must be enclosed in a sealed envelope endorsed on the back "Proposal for Constructing Sewage Treatment Works," and addressed to J. S. Lakin, Member, State Board of Control, and delivered at his office not later than 1 P.M., Thursday, May 22, at which time and place bids will be publicly opened and read. The Board reserves the right to reject any or all bids.

J. S. LAKIN, Member,
State Board of Control.

Bids: May 8.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 10, Section No. 1I, (Fort Lee Ferry to Arcadian Way), Bergen County, estimated to cost $481,000.00. Bids to be received on a percentage of the engineer's estimate.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, May 28, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10.00) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, and addressed to State Highway Commission, Broad Street aBnk Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: May 27.

Road Embankment

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P. M., May 27, 1919, for the construction of 16 miles of earth road embankment involving approximately the following principal quantities:

Earth excavation	227,200 cu.yd.
Clearing	21 acres
Clearing and grubbing	36 acres
Corrugated pipe, 18 in. diam.	1,340 lin.ft.
Corrugated pipe, 24 in. diam.	450 lin.ft.
Plain concrete headwalls	90 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the District will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT DISTRICT
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: May 20.

Bituminous Concrete Surfacing

Brockton, Mass.

Bids for laying "Bituminous Concrete Surfacing" or other mixed bituminous surfacing or pavement on North Main, Howard and Copeland Streets, will be received in the office of the Highway Commissioners, City Hall, Brockton, Mass., until four o'clock P.M., on Tuesday, May 20, 1919.

Plans and specifications and other necessary information may be obtained at the office of the City Engineer upon deposit of ten dollars ($10), which will be refunded if the plans and specifications are returned in good condition.

Approximate number of square yards of pavement contemplated is thirty thousand (30,000).

The right to reject any or all bids is expressly reserved.

Per Order:
PATRICK F. McMAHON,
MICHAEL J. KELLEHER,
JAMES F. POWERS,
Highway Commissioners.
HAROLD S. CROCKER, City Engineer.
Office of City Engineer.
City Hall, Brockton, Mass.
Brockton, May 5, 1919.

EXPERT ADVICE
is always worth paying for. On
Contract Bonds
it is invaluable to you. Try it. Expert advice and attention known as **Engineering Insurance Service** is yours at no extra charge.
HARMON V. SWART
19 Liberty Street, New York

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: June 5.

Bridge Construction

STATE OF CONNECTICUT
HIGHWAY DEPARTMENT
Hartford, Conn.

Contractors experienced in constructing difficult foundation work and large concrete bridges are invited to present proposals for the construction of the approaches, substructure and reinforced concrete superstructure of a bridge to be built across the Housatonic River between the towns of Milford and Stratford.

The main structure will be a reinforced concrete design consisting of five ribbed arches of 100 foot clear span and sixty (60) feet in width; two girder approach spans about fifty-two (52) feet in length; and suitable approach embankments. The entire improvement is to be covered with a permanent pavement totaling approximately 2800 feet in length.

Bids will be received by the State Highway Commissioner in his office at the State Capitol at Hartford, Connecticut, until 2 P.M. of the 5th day of June, 1919, at which time they will be publicly opened and read.

A surety company bond or a certified check for one-third (⅓) of the contractor's estimated cost of the bridge must be presented with the bid; the check or bond to be returned after the award and signing of the contract by the lowest responsible bidder.

Upon the execution of the contract, a surety company bond must be filed for the full amount of the contract.

All bids must be made on and in conformity with the form of proposal which with the contract, specifications and bond may be obtained and plans examined at the following places:

Office of the State Highway Commissioner, Hartford, oCnn.

Office of Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

Complete plans and specifications will be furnished to bidders upon payment of ten (10) dollars. This amount will be refunded upon the return of the same in good condition.

The Highway Commissioner reserves the right to reject any or all bids or to accept any bid which in his judgment is for the best interest of the State of Connecticut, and other interested parties.

CHARLES J. BENNETT,
State Highway Commissioner.
Dated at Hartford, Conn.,
May 5, 1919.

Bids: May 22.

Sewer System Extensions

OFFICIAL NOTICE NO. 41
PUBLISHED BY AUTHORITY OF THE
SEWERAGE COMMISSION OF THE
CITY OF MILWAUKEE
Milwaukee, Wis.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of said City at its offices in the City Hall until 2 P.M., the 22nd day of May, 1919, at which time and place during the session of the said Commission, the proposals will be publicly opened and read.

The work to be done embraces the hauling and laying of 2370 lin.ft. of 72 in. Pre-Molded Reinforced Concrete Pipe

One Valve Chamber complete, including 72 in. Sluice Gate.

Together with all manholes and other appurtenances.

The time allowed for the completion of this contract shall be nine (9) months from the date of the Engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated, shall, for each day in excess thereof, be fifty (50) dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of five thousand dollars ($5000).

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Sewerage Commission after the contract has been awarded or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and Sewerage Commission.

Specifications and blank forms of proposals can be obtained and detailed plans examined, at the office of the Sewerage Commission in the City Hall, and a full set of plans will be sent to any contractor upon receipt of five dollars ($5). This sum to be returned upon surrender of the plans in good condition.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES,
Countersigned: Secretary.
A. P. PUELICHER, Deputy Comptroller.

Bids: June 2.

Water Filtration Plant and Centrifugal Pumping Equipment

City of Whiting, Indiana.

Sealed Proposals, endorsed "Proposal for Water Filtration Plant, Contract No. 1" and "Proposal for Centrifugal Pumping Equipment, Contract No. 2" will be received for the City of Whiting, by the Board of Public Works thereof, at the City Hall, Whiting, Ind., until 12 o'clock noon on the 2nd day of June, 1919, and will be then publicly opened and read according to law.

The work for which proposals are invited under Contract No. 1, includes the construction of a mechanical water filtration plant of the gravity type with a rated capacity of about four million gallons per 24 hours, including an aerating basin, coagulating basin, filters, filtered water reservoir, head house, piping connections with the city mains, erecting motor driven centrifugal pumps furnished under Contract No. 2 and all appurtenances, in accordance with plans and specifications on file in the City Hall at Whiting, Ind., and in the offices of the engineers, Pearse and Greeley, 39 W. Adams St., Chicago, Ill., Contract No. 2 includes the furnishing of motor driven centrifugal pumping equipment and appurtenances.

The work is located between the P., Ft. W. and C. Ry. and the B. and O. C. T. R.R., south of 119th Street in the City of Whiting, Ind.

Alternate bids are required on two sizes of coagulating basins and two sizes of filtered water basins.

Each proposal must contain the full name of every person or company interested in the same and must be accompanied by cash or a certified check, made payable to the order of the City Controller of Whiting, Ind., in the sum of two (2) per cent. of the amount of bid. This sum is a guarantee that if the proposal is accepted, a contract will be enterede into and its performance properly secured.

All proposalse must be made upon blank forms furnished by the City of Whiting, and in acordance with the "Requirements for Bidding and Instructions to Bidders" attached thereto. Proposals may be entered upon one or both contracts

The Board of Public Works of the City of Whiting reserves the right to reject any or all bids, to omit any one or all of the items 4, 5, 10 and 12, to waive or not waive any informality in the bids received and to accept any bid which it deems most favorable to the City of Whiting, Indiana.

Requirements for Bidding, Instruction to Bidders, For mof Proposal, Contract, Specifications, Form of Bond and Plans, may be obtained from the Board of Public Works of Whiting, or from Pearse and Greeley, 39 W. Adams St., Chicago, upon deposit of Ten ($10.00) Dollars, which sum so deposited will be refunded in good condition within thirty (30) days after the opening of bids.

CITY OF WHITING
By JAMES J. NEJDL,
FRANK B. LEWIS,
A. GONDON,
Board of Public Works.
WALTER E. SCHRAGE, Mayor.

POSITIONS VACANT

ASSISTANT county engineer, competent to make road and land survey, profile, estimate, inspect roads and culvert constructions. Bennett-Coker & Byrne, Poteau, Oklahoma.

ASSISTANT general manager wanted; a Detroit manufacturing industry employing about 1000 men in the automobile line needs the services of a trained executive, who can take general charge of production and act as assistant general manager. The salary will be satisfactory. All applications will be kept strictly confidential. A personal interview can be arranged on receipt of written application with information as to age, experience, etc. Address P-379, Eng. News-Record, Chicago.

DESIGNING engineer for Boston consulting engineer's office. Must be A-1 structural man; prefer technical graduate. Should have experience in design of hydro-electric power houses, textile mills, heavy mill construction, warehouses, terminals, dams and general engineering work. State references (which positively will not be investigated until after interview), salary expected, education, when available and past record. P. O. Box 3278, Boston, Mass.

DRAFTSMAN must be neat and excellent letterer, and understand highway and municipal work. Bennett-Coker & Byrne, Poteau, Oklahoma.

DRAFTSMAN wanted, competent to originate designs for old-established company in the vicinity of New York, about to begin the manufacture of rolling steel shutters. State experience, salary and when free. Permanent position to right man. P-382, Eng. News-Record.

DRAFTSMAN—Experienced on structural steel and plate work; must be competent to check drawings and list materials; state salary, experience and when available first letter. Address Box 386, Iola, Kansas.

DRAFTSMAN and designer wanted on construction machinery. Permanent position with a future. Write fully giving education, experience and references. Waterloo Cement Machinery Corporation, Waterloo, Iowa.

EXECUTIVE position open to man with good engineering training and executive experience. Salary to start, $5000, with promise of increase when ability is demonstrated. In reply, give age, education and experience. Address P. O. Box 1578, Boston, Mass.

INSTRUMENTMEN wanted for drainage and highway work in the central west; position available for a year. Salary $125 to $150 per month, expenses paid while away from headquarters. Work consists of topographical surveys and levels. Fast and accurate men wanted. P-270, Eng. News-Record, Chicago.

SEARCHLIGHT SECTION

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

- Positions Wanted
- Evening Work Wanted
- Vacation Work Wanted
- Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

- Agencies Wanted
- Agents Wanted
- Business Opportunities
- Desk Room for Rent
- Educational
- Employment Agencies
- Desk Room Wanted
- Foreign Business
- Positions Vacant
- Partner Wanted
- Representations Wanted
- Salesmen Wanted
- Patents for Sale
- Plants for Sale
- Sub-Contracts Wanted
- Work Wanted
- Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space for 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies.

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind" ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave., New York
935 Real Estate Trust Bldg., Philadelphia
657 Leader-News Bldg., Cleveland
1570 Old Colony Bldg., Chicago
519 Newhouse Bldg., Salt Lake City
501 Rialto Bldg., San Francisco

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

An Opportunity to Make Some Extra Money

Construction work is ready for a big boom and the Engineering News-Record wants to publish it all. To do this we must add to our list at least

23 CORRESPONDENTS

The kind of men we want are those who are in close touch with construction work in their community and can devote a little spare time during business hours to calling on engineers, contractors, etc., gathering reports. Representatives are wanted in the following centers:

- **Atlanta, Ga.**
- **Carson City, Nev.**
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- **Des Moines, Ia.**
- **Erie, Pa.**
- **Halifax, N. S.**
- **Jackson, Miss.**
- **Jersey City, N. J.**
- **Kansas City, Mo.**
- **Keokuk, Ia.**
- **Lowell, Mass.**
- **Miami, Fla.**
- **Milwaukee, Wis.**
- **Mobile, Ala.**
- **Montgomery, Ala.**
- **Newark, N. J.**
- **New Orleans, La.**
- **Oklahoma, Okla.**
- **Sacramento, Cal.**
- **Santa Fe, N. M.**
- **Tulsa, Okla.**
- **Winnipeg, Man.**
- **Worcester, Mass.**

Write, telling all about your present work and how much time you have available, to

L. V. FLETCHER

Engineering News-Record, 10th Avenue, at 36th Street, New York

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

U. S. ENGINEER OFFICE, Florence, Alabama. Sealed proposals will be received here until eleven o'clock A.M., May 21, 1919, and then opened, for furnishing Derricks. Further information on application.

OFFICIAL PROPOSALS

Bids: May 21.

Highway Work

Westwood, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Council of the Borough of Westwood, Bergen County, New Jersey, for the construction of approximately ten thousand (10,000) square yards of Cement Concrete Pavement on Railroad Avenue.

Drawings and specifications are on file at the office of the Supervisor of Roads, Hackensack, N. J., and can be obtained upon deposit of $25, which amount will be refunded upon return of them in good condition.

Bids will be received until 8:30 P.M., May 21, 1919, at the Fire House, Westwood, New Jersey.

J. ERNEST THIER,
Supervisor of Roads.

Bids: May 26.

Highway Work

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., May 26, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 13,623 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Blair County: 32,229 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Butler County: 11,065 feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Cameron County; 26,648 ft. of Reinforced Concrete and Hillside Vitrified Brick in Clarion County; 4984 ft. of Reinforced Concrete in Clinton County; 16,552 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Crawford County; 33,917 feet of Bituminous Concrete Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Dauphin County; 53,372 ft. of Reinforced Concrete in McKean County; 17,891 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 10,554 ft. of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 13,464 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Union County; 9550 ft. of Reinforced Concrete in Venango County; 7783 feet of Reinforced Concrete and Hillside Vitrified Brick in Warren County; 27,688 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Wayne County and 2085 ft. of Reinforced Concrete in Westmoreland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: May 28.

Paving

Milan, Mich.

1. Sealed bids for the paving of Wabash Street from the South End of the Bridge over the Saline River to the South Corporation Line, in the Village of Milan, Mich., in accordance with the plans and specifications on file with the Village Clerk will be received by said clerk, until 1:30 o'clock P.M. on Wednesday, May 28, 1919, and thereupon publicly opened and read.

2. Bids shall state the prices in words and figures, on the blanks provided therefor, shall be inclosed in a sealed envelope marked, "Bid for Pavement," and addressed to the Village Clerk.

3. Each bid shall contain the full name of every person or company interested in it and shall be accompanied by a certified check on a solvent bank, payable to the Village Clerk, in the sum of one thousand dollars, as guarantee that, if the bid is accepted, a contract and an approved bond equal to the bid to secure the performance of the contract, will be entered into within 10 days from the date of notice of award of contract.

4. Each bid for bituminous pavement shall be accompanied by a sample of bituminous cement, labelled with the name of the bitumen, manufacturer, and bidder.

5. The Council reserves the right to reject any and all bids. By order of the Village Council of Milan, Mich., April 14, 1919.

JESSE BUTTON,
Clerk.

GEORGE CHAMPE, Civil Engineer,
Toledo, Ohio.

PRELIMINARY ESTIMATE

1. Grading	4100	cu.yds.
2. 10 inch Pipe Sewer	200	lin.ft.
3. Manholes	4	
4. Catch Basins	12	
5. Inlets	8	
6. Straight Concrete Curb	4724	lin.ft.
7. Circular Concrete Curb	703	lin.ft.
8. 4 inch Drain Tile	5427	lin.ft.
9. Concrete Pavement	8448	sq.yds.

Bids: May 21.

Paving

Reinbeck, Iowa.

Sealed proposals will be received at the office of the Town Clerk, Reinbeck, Iowa, until two (2:00) o'clock P.M. on the 21st day of May, 1919, for a street improvement, consisting of the following approximate quantities:

38,300 sq.yd. vitrified block, asphaltic concrete, sheet asphalt, or bitulithic paving.

20,800 lin.ft. combined curb and gutter.

Certified check, $5000.

Plans, specifications and forms on file with the Town Clerk or the Town Engineer.

R. B. FERGUSON, Town Clerk.

J. G. THORNE, Town Engineer,
317 Howes Block,
Clinton, Iowa.

Bids: June 3.

Vitrified Brick for Paving

Saranac Lake, N. Y.

Bids will be received until June 3, 1919, for furnishing vitrified paving brick for 1800 sq.yd. of pavement. Submit samples.

HARRY HULL, Engineer.

Address: S. A. MILLER, Clerk,
Village of Saranac Lake, N. Y.

OFFICIAL PROPOSALS

Bids: May 20.

Grading, Paving, Etc.

Beverly, N. J.

Notice is hereby given that sealed bids will be received by the Board of Commissioners of the City of Beverly, N. J., for the construction, reconstruction, laying, grading, paving, repaving and improving of cement or concrete sidewalks, curbs and crosswalks on the streets of the City of Beverly, N. J., estimate amount of surface work 315,000 sq.ft. of sidewalks and crosswalks, 70,000 lin.ft. of curbing, and opened and read in public at the City Hall, Beverly, N. J., Tuesday, May 20, 1919, at 8 o'clock P.M.

Specifications and forms of bids, contract and bond for proposed work, prepared by Clement M. Anderson, City Surveyor, and approved by the Board of Commissioners of the City of Beverly have been filed at the office of the City Surveyor, City Hall, Beverly, N. J., and may be inspected by prospective bidders during business hours on and after May 7, 1919. Bids must be made in the manner designated and required in the Specifications and must be enclosed in sealed envelopes, bearing the name and address of the bidder on outside, addressed to W. Fred Brelsford, City Clerk, and must be accompanied by a certificate from a surety company to furnish bond and certified check for $300, and be delivered at the place on the hour above named.

The Standard proposal form is attached to the Specifications, copies of which will be furnished on application to the City Surveyor.

By order of the
BOARD OF COMMISSIONERS OF
THE CITY OF BEVERLY.
Attest: W. FRED BRELSFORD,
Dated: May 1, 1919. City Clerk.

Specifications and Typical Section, $3 per set.

Bids: June 4.

Pavement Construction

Village of Bradford, Ohio.

Sealed proposals will be received by W. Lee Hook, Village Clerk, for the construction approximately of:

10,500 cu.yd. grading.

21,600 sq.yd. pavement (all permanent (types).

13,500 lin.ft. stone or concrete curb.

9,800 lin.ft. sewers (6 in. to 24 in.).

In said Village until 12 o'clock noon on the 4th day of June, 1919, and publicly opened and read at the Council Chamber of the Village of Bradford, Ohio.

Plans and specifications may be seen at the Office of the Village Clerk, at the Office of the Engineers or may be obtained from the Engineers upon payment of $5, no refund.

Certified check, $1000, payable to Village Clerk.

The Council reserves the right to reject any or all bids.

W. LEE HOOK, Village Clerk.

THE L. A. BOULAY CO., Engineers,
1250 Nicholas Building,
Toledo, Ohio.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 8, 1919.—Sealed proposals will be opened in this office at 3 P.M., June 5, 1919, for the construction of the United States post office at Denton, Texas. Drawings and specifications may be obtained from the Custodian of the site at Denton, Texas, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bridge Construction

Mandan, N. D.

Sealed proposals will be receive at the Morton County Court House of Mandan, North Dakota, for the preliminary survey, soundinds, barrings, design and estimate of cost necessary for the submittal to the Secretary of the U. S. Department of Agriculture of a Federal Aid Project statement by the North Dakota State Highway Commission for the construction of a bridge across the Missouri River between Bismarck and Mandan, will be received by the County Boards of Commissioners of the County, Mr. Burleigh and Morton on joint session at the Morton County Court House at Mandan, N. D., not later than 2 P.M. of the 19th of May, 1919. Work to be begun not later than June 1, 1919. The work as above outlined is to be executed to the satisfaction of the North Dakota State Highway Commission.

Each bidder must acompany his proposal with a statement regarding his ability, experience and equipment for carrying out the above work. The right is reserved to reject any or all bids.

LEE NICHOLS, County Auditor.

Bids: May 26.

Street Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the City of Salem for the reconstruction of Streets in the City of Salem in the County of Salem, N. J., as follows:

Macadam Foundation	4,366	Sq.Yds.
Repaired Macadam Foundation	33,924	" "
Bituminous Macadam, Penetration Surface	38,290	" "
Repaired Bituminous Concrete	14,177	" "

and opened and read in public at Council Chamber (Liberty Fire Engine House), Salem, N. J., on Monday, May 26, 1919, at 8 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasby & Sparks, Engineers, and approved by the State Highway Commission, have been filed in the office of the said engineers at Salem, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Mayor and Common Council of the City of Salem, N. J., and must be accompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Mayor and Common Council of the City of Salem, N. J.

(Signed) WM. B. DUNN,
Recorder.

U. S. ENGINEER OFFICE, New London, Conn.—Sealed proposals for dredging in Greenwich Harbor, Conn., will be received here until 2 o'clock p. m., May 28, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffiin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. **BRIDGES**, City Manager,
Griffiin, Georgia.

G. M. HARRINGTON,
City Engineer, Griffiin, Georgia.

SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Old Federal Bldg., Wilmington, Del.—Sealed proposals will be received here until 11 A.M., May 27, 1919, and then opened, for dredging Maurice River, N. J. Further information on application.

PROPOSALS FOR JETTY AND REVETMENT.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., May 28, 1919, and then opened, for Jetty and Revetment Construction in Miami Harbor (Biscayne Bay). Further information upon application.

PROPOSALS FCR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater, at Calumet Harbor, Ill. and Ind. Further information on application.

OFFICIAL PROPOSALS

Bids: May 29.

Street Improvement

Las Vegas, New Mexico.

Separate sealed proposals for the paving and improving of the following streets within the City of Las Vegas, New Mexico, will be received at the office of the City Clerk until 8:00 o'clock P.M., May 29th: National Street from Sixth Street to Twelfth Street; Sixth Street from Main Street to Friedman Avenue; Seventh and Eighth Streets from Douglas Avenue to Friedman Avenue. All proposals must be upon blanks furnished by the City and must be accompanied by a certified check on some solvent bank in the sum of $1000.00 and made payable to the City Treasurer. Approximate quantities as follows: Concrete, Topeka or Bitulithic pavement, 52,777 Sq.Yds.; Concrete curb and gutter, 22,713 lin.ft.; concrete alley return, 528 lin.ft., which is approximately one-half of a two-year program which has been authorized. Alternate bids will be received based upon the acceptance, at par, for all work of certificates bearing 6% interest and of certificates bearing 8% interest. Payments will be made in assessment certificates upon the completion of each separate street improvement. Plans can be seen and forms of proposal obtained at the office of Vincent K. Jones, Consulting Engineer, East Las Vegas, N. M. No informal or conditional bid will be considered. The right is reserved to reject any or all bids.

City Council of the City of Las Vegas, N. M.
By F. O. BLOOD, Mayor.

ATTEST:
W. G. BENJAMIN, Clerk.

Bids: May 20.

Boiler Breeching

Ogdensburg, N. Y.

Sealed proposals for Boiler Breeching, St. Lawrence State Hospital, Ogdensburg, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuedsay, May 20, 1919, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3015, including Addenda No., dated April 22, 1919. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the St. Lawrence State Hospital, Ogdensburg, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: May 1, 1919.

OFFICIAL PROPOSALS

Bids: May 28.

Syphon Duplication

Jersey City, N. J.

Sealed proposals for furnishing and laying of 72-in. steel water pipe between Boonton Reservoir and Jersey City, as follows: Section No. 1, to duplicate the existing syphons between Boonton Reservoir and Passaic River at Lyndhurst; and Section No. 2, to duplicate the existing syphons between the Passaic Rivert at Lyndhurst and Summit Avenue Reservoir at Jersey City, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N.J.,

WEDNESDAY, MAY 28, 1919,

at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal form, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or may be seen and obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

The Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By Order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Bids: June 4.

Sanitary Sewers

Garner, Iowa.

Sealed proposals will be received by the Town Clerk in his office in the Town Hall until 2:30 P.M., June 4, 1919, for constructing a system of sanitary sewers and a sewerage disposal plant.

Section A—Disposal Plant, Concrete Tank, Sand Filters, Sludge Bed.

Section B—Outlet main sewer.
3750 lin.ft. of 18 in. pipe.
6 Manholes.

Section C—Lateral Sewers.
1320 ft. of 18 in. pipe.
2952 ft. of 15 in. pipe.
3400 ft. of 12 in. pipe.
3332 ft. of 10 in. pipe.
24285 ft. of 8 in. pipe.
80 Manholes.
24 Flushtanks.

Certified check required, $1000. Arrangements may be made with local banks for cash on each Section as completed. Plans, specifications and forms on file with the Town Clerk or the Town Engineer.

H. V. REED,
Town Clerk.

J. G. THORNE, Town Engineer,
317 Howes Block,
Clinton, Iowa

Bids: June 2, 1919.

Public Water Supply

MUNICIPAL BOARD

Newark, N. Y.

Notice is hereby given that sealed proposals for the construction of water supply improvements for Newark, N. Y., will be received at the office of the Municipal Board of Newark, N. Y., until 10 o'clock A.M., June 2, 1919, and then publicly opened.

Description of work to be done:

To construct an earthen dam and dikes across Case Creek and the adjoining valley at a point about two and one half (2½) miles southeast of Clifton Springs, N. Y. The earthen dam and dikes will contain approximately three thousand (3000) yards of concrete and thirty thousand (30,000) yards of earth embankment, to construct and furnish all the material for a million gallon mechanical filtration plant, to be built of reinforced concrete and brick, to haul and lay about thirty-eight thousand (38,000) feet of fourteen (14) inch cast iron pipe, to furnish about one thousand seven hundred (1700) tons of fourteen (14) inch cast iron pipe. Separate bids will be received on each division of the work.

Detailed plans and specifications of the work may be seen for examination at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of Mr. Staniland Scarth, Municipal Board, Newark, N. Y. Plans and specifications may be obtained for the sum of $10, which will be returned upon the return of the plans and specifications in good condition.

A certified check for five per cent. (5%) of the amount of the bid made, payable to the order of the Municipal Board, must accompany each proposal. The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes furnished for that purpose with the specifications. Only sealed bids will be considered.

All bids received will be retained by the Municipal Board and will not be returned to the contractors.

GEO. A. BURNHAM,
Chairman Municipal Board.

Attest:
FRANK J. BALTZEL,
Clerk Municipal Board.

Bids: May 22.

Dredging and Laying Steel Intake Pipe and Concrete Crib in St. Clair River near Sarnia

Ontario, Can.

Contractors are invited to examine the plans, specifications and site for above work and to submit tenders until 11 A.M. on May 22, 1919.

A deposit of $20 will be required on plans sent out.

Full particulars on application to the undersigned:

HERBERT SANDERS,
Chairman Water Works Committee.
Sarnia, Ont.
JAMES D. STEWART,
City Clerk,
Sarnia, Ont.
F. W. I. ITHOROLD CO., LIMITED,
Consulting Engineers,
167 Avenue Road, Toronto.

Bids: May 20.

Construction of Pavement

VILLAGE OF GROSSE POINTE FARMS,

Wayne County, Mich.

Sealed proposals will be received by the Village Engineer of Grosse Pointe Farms, Wayne County, Michigan, up to 8 P.M., Tuesday, May 20, 1919, for the furnishing of all materials and the construction of pavement on Grosse Pointe Boulevard from Fisher Road to Provencal Boulevard, including grading and such catch basins, inlets and storm sewers as shown on plans, and consisting of approximately 17,600 sq.yd. of pavement, 11,000 lin.ft. of concrete curbing, 10,000 cu.yd. of excavation, 23 inlets, 4 catch basins, 1000 ft. of 24 in., 2000 ft. of 18 in., 2000 ft. of 15 in. and 3000 ft. of 12 in. vitrified pipe, and 2000 ft. of 10 in. catch basin connections. Proposals will be received on:

One course plain 9 in. concrete.

Creosote block on 8 in. concrete foundation.

Asphaltic concrete on 8 in. foundation.

This work to be done on Grosse Pointe Boulevard from Fisher Road to Provencal Boulevard.

The detailed plans and specifications under which the work is to be done may be examined at the office of the Village Engineer, Village Hall, Kerby Road, or may be obtained by making a deposit of three dollars, which will be refunded upon return of plans and specifications in good condition.

A cash deposit or certified check for an amount equal to 5% of the amount bid must accompany each proposal. Bids will be received for the whole or any part of the work.

The Village reserves the right to reject any and all bids, to waive defects and to accept any bid in whole or in part.

ROBERT H. ERLEY,
Village Engineer.

Bids: May 20.

Concrete Pavement

Town of Nutley, N. J.

Sealed bids for constructing concrete pavement on Park Ave. from Passaic Ave. to Washington Ave. will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., May 20th, 1919, at which time they will be publicly opened and read by the Board of Commissioners. The principal items of the work are approximately as follows:

7800 sq.yds. of concrete pavement, 8" thick in the center and 6" thick at the sides.
1600 lin.ft. of bluestone curb reset in concrete.
3500 lin.ft. of integral concrete curb.

Pamphlets containing Information for Bidders, Forms of Proposal and Agreement, and Specifications, can be obtained from the Town Engineer or Town Clerk on pawment of $1.00 which will be refunded on the return of the pamphlet in good condition.

A certified check for $3000 must accompany each bid and a bond for the total amount of the contract will be required for the faithful performance of the contract.

EMIL DIEBITSCH,
Mayor and Commissioner of Streets
and Public Improvements.
ELIOT N. SMITH,
Town Engineer.

Bids: May 21.

Road Machinery

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at said office until 10 a.m., May 21, 1919, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for Road Machinery to be used for Maintenance Work of the Department. Bidding blanks and specifications may be obtained free upon application to the State Highway Department, Harrisburg, Pa.

LEWIS S. SADLER.

Ore Stripping

Americus, Ga.

Work consists of 500,000 to 1,500,000 yards of materials varying in thickness from 30 to 70 feet. Work should preferably be done by a large shovel or drag line so that the ore can be mined by the company as rapidly as it is uncovered by the contractor. Mines located about five miles from Central Railroad of Georgia near Americus, Ga. For further information apply to E. S. Fickes, Chief Engineer, Aluminum Company of America, 2400 Oliver Bldg., Pittsburgh, Pa.

Bids: June 9.

Pipe Sewers

Stratford, Conn.

Pursuant to a resolution adopted the 7th day of May, 1919, the Board of Sewer Commissioners of the Town of Stratford Conn., will receive at its meeting, to be held on the 9th day of June at 8 P.M. sealed proposals for furnishing materials and doing all other work required to complete the construction of about four (4) miles of pipe sewers from eight (8) to twenty-four (24) inches in diameter with manholes and flushing manholes complete. And also for furnishing all materials and doing all other work required to construct the sewage disposal works, chlorine treatment house and tidal basin and sludge bed, including the necessary piping and grading, etc.

Plans may be seen and specifications and forms of proposal obtained at the office of the Board of Sewer Commissioners, Town of Stratford, Conn., or at the office of Clyde Potts, 30 Church Street, New York City.

Plans may be taken away upon the payment of ten dollars ($10) for each set, the same to be refunded if the plans are returned within twenty days, in good condition.

Bids on the sewage system umst be accompanied by a certified check on a solvent bank for $5000, and bids on the sewage disposal works must be accompanied by a certified check on a solvent bank for $10,000.

The Board of Sewer Commissioners reserve the right to reject any and all proposals, and to waive any informality in the proposals received, and to accept any proposal which they deem to be most favorable to the interests of the Town.

F. S. BEARDSLEY,
Chairman.

PAUL P. GOODELL,
Secretary.

OFFICIAL PROPOSALS

Bids: May 20.

Notice to Contractors

STATE OF MARYLAND
STATE ROADS COMMISSION

Baltimore, Md.

Sealed proposals for the following:

ALLEGANY COUNTY, CONTRACT NO. A-17: FEDERAL AID PROJECT NO. 24 -One section of State Highway from the Corporate Limits of Cumberland to Brady Lane near Cresaptown, for a distance of 4.68 miles. Concrete.

BALTIMORE COUNTY, CONTRACT NO. B-34: FEDERAL AID PROJECT NO. 27—One section of State Highway through Reisterstown from the end of the concrete road to Hitshue's Corner, for a distance of 0.93 miles. 37 ft. concrete road with combination curb and gutter (40 ft. between curbs) United Railways and Electric Company's tracks in center.

BALTIMORE COUNTY, CONTRACT NO. B-W-A — One section of Baltimore-Washington Boulevard from New City Limits of Baltimore to the Baltimore and Ohio overhead crossing near Relay, for a distance of 2.70 miles. Sheet asphalt on existing concrete base.

CECIL COUNTY, CONTRACT NO. Ce-26: FEDERAL AID PROJECT NO. 7, SECTION B—Surfacing the sections of gravel road between North East and Elkton, for a distance of 1.38 miles. Concrete.

DORCHESTER COUNTY, CONTRACT NO. D-19B—One section of State Highway from the end of Contract No. D-19 near Madison to the beginning of Contract No. 466 at Parsons Creek, for a distance of 2.15 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 20th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be reqiured to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 7th day of May, 1919.

FRANK H. ZOUCK,
Chairman.

CLYDE H. WILSON,
Secretary.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

PROPOSALS FOR DREDGING. U. S. Engineer Office, Duluth, Minn. Sealed proposals will be received here until 10 a.m., May 21, 1919, and then opened, for dredging in Duluth-Superior Harbor, Minn. and Wis. Further information on application.

OFFICIAL PROPOSALS

Bids: May 28.

Highway Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., May 28, 1919, for the road work on the National and the Dixie Highways designated by county and section below. All bids shall be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois. Plans may also be examined in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the District Engineer, they may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3, or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

NEWS HIGHWAY WORK TABLE ....

Route	County	Sec.	Width Feet	Approx. Length Feet
National Highway	Clark	D-15d	16	17,868.0
National Highway	Clark	A	16-18	29,200,.0
National Highway	Clark	B	16-18	24,242.0
National Highway	Clark	C	16-18	23,736.0
National Highway	Clark	D	18	26,756.0
National Highway	Cumberland	F-15d	16	17,218.0
National Highway	Cumberland	E	16	24,165.0
National Highway	Cumberland	F	16	19,900.0
National Highway	Cumberland	G	16	20,900.0
National Highway	Cumberland	H	16	28,700.0
Dixie Highway	Will	8	18	24,800.0
Dixie Highway	Will	9	18	18,600.0
Dixie Highway	Will	10	18	15,200.0
Dixie Highway	Will	H-15d	18	4,453.0

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer.

By Order of the Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: May 24.

Vitrified Paving Blocks

Kalamazoo, Mich.

The undersigned will receive sealed bids until 5 P.M., Monday, May 24, 1919, for 1,886,000 vitrified paving blocks. Sample of brick to accompany bid. State if repressed or wire cut. City reserves the right to reject any or all bids.

C. L. MILLER,
City Purchasing Agent.

OFFICIAL PROPOSALS

Bids: May 16.

Road Work

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Sealed proposals for the reconstruction of the following sections of State highway will be received by the State Board of Public Roads at its office, State House, Providence, R. I., until 12 M. on Friday, May 16, 1919, at which time they will be opened and read in public.

1. East Main Road, Portsmouth, 9297 feet —bituminous macadam.
2. Waterman Avenue, East Providence, 8180 feet—cement concrete.
3. Hartford Pike, Johnston and Scituate, 10,560 feet—bituminous concrete.
4. Mendon Road, Lincoln, 3550 feet—cement concrete.

Bids must be made upon blank forms to be furnished by the Board.

No bids will be received unless accompanied by a certified check for the sum of $200.00 payable to the State of Rhode Island.

The Board reserves the right to reject any and all bids and to give preference to towns or cities in accordance with Section 5 of Chapter 84 of the General Laws.

Plans may be examined and specifications and bidding blanks may be obtained at the office of the State Board of Public Roads, State House, Providence, R. I., on and after Wednesday, May 7, 1919, every week day (except holidays and Saturdays) between the hours of 9 a.m. and 5 p.m., Saturdays 9 a.m. to 12 m.

STATE BOARD OF PUBLIC ROADS
ABRAM L. ATWOOD
BENJAMIN F. ROBINSON
FRANK COLE
MICHAEL VAN BEUREN
J. HENRY WOODARD

Bids: May 21.

Highway Work

Hillsdale, N. J.

Notice is hereby given that sealed bids will be received by the Township Committee of the Township of Hillsdale, Bergen County, New Jersey, for the construction of approximately twenty-five (2500) hundred square yards of Cement Concrete Pavement on Railroad Avenue.

Drawings and specifications are on file at the office of the Supervisor of Roads, Hackensack, N. J., and can be obtained upon deposit of $25, which amount will be refunded upon return of them in good condition.

Bids will be received until nine (9) P.M., May 21, 1919, at the Fire House, Hillsdale, New Jersey.

J. ERNEST THIER,
Supervisor of Roads.

U. S. ENGINEER OFFICE, NEW LONDON, CONN.—Sealed proposals for maintenance dredging in New Haven Harbor, Conn., will be received here until 2 o'clock p.m., May 20, 1919 ,and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: May 27.

Road Embankment

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P. M., May 27, 1919, for the construction of 16 miles of earth road embankment involving approximately the following principal quantities:

Earth excavation	227,200 cu.yd.
Clearing	21 acres
Clearing and grubbing	36 acres
Corrugated pipe, 18 in. diam.	1,340 lin.ft.
Corrugated pipe, 24 in. diam.	450 lin.ft.
Plain concrete headwalls	90 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the District will be furnished on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT DISTRICT
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

Bids: May 27.

Trunk and Lateral Sewers

Nashville, Tenn.

OFFICE OF THE BOARD OF COMMISSIONERS

Notice is hereby given that sealed proposals will be received at the office of the Secretary until 10 o'clock A.M., Tuesday, May 27, 1919, for constructing the following sewers:

1. A section of Brown's Creek intercepting sewer.
2. A section of Richland Creek intercepting sewer.
3. A group of clay pipe sewers in streets and alleys between Hamilton and Jefferson Streets, and between Warren Street and Seventeenth Avenue, north.

Approximately 975 thousand brick and 6750 lin.ft. of clay pipe will be required. All proposals must be submitted on blank forms, copies of which, together with other specified requirements, will be furnished by the City Engineer upon application. Separate proposals must be submitted for each of the above named sewer jobs, and contract will be awarded for each job separately. A certified check or cash in amount called for on proposal form must accompany each bid. Said check or money will be returned to unsuccessful bidders upon award of contract and to successful bidders when they have made approved bond for the faithful performance of their contract. The right is reserved to reject any and all bids.

By Order of the Board of Commissioners.
WM. GUPTON, Mayor.
Attest:
J. W. DASHIELL, Secretary.

OFFICIAL PROPOSALS

Bids: May 26.

Water Main and Appurtenaces

Coatesville, Pa.

Sealed proposals will be received by the Mayor and members of the Council of the City of Coatesville, Pa., at 8 P.M., Monday, May 26, 1919, for furnishing and laying approximately 1400 ft. of 12 in. cast iron, class B, water main and appurtenances.

The work includes the following approximate quantities:

58 Tons 12 in. (Class B) pipe.
4 Tons 6 in. (Class B) pipe.
7 12 in. by 6 in. Tees.
8 6 in. Valves.
2 12 in. Valves.
4 Fire hydrants.
3 6 in. to 4 in. reducers.

Plans, specifications and blank forms for bidders can be obtained at the office of the City Engineer, Third Ave. and Chestnut Street for $5, which will be refunded upon return of the plans and specifications.

All bids must be submitted on blanks furnished by the City and accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workman's Compensation Act of Pennsylvania.

The Council reserves the right to reject any or all bids or to award the work as may appear to be for the best interests of the City.

WILLIAM S. G. COOK,
City Clerk.
CHAS. A. NILES,
City Engineer.

Bids: May 27.

Steel and Concrete Bridge Construction

Poinsett, Ark.

Sealed proposals will be received by the Board of Commissioners of the Ozark Trail Road Improvement District, Poinsett County, Arkansas, at Marked Tree, Arkansas, until 2 o'clock P.M., May 27, 1919, for the construction of the following bridges:

4—50 ft. steel plate girder spans; width 18 ft., with alternate bids on steel truss spans of same length and width.
2—50 ft. steel truss spans; width 16 ft.
400 lin.ft. concrete viaduct; width 18 ft.
112 lin. ft. I-beam spans; width 16 ft.
Reinforced concrete culverts; 95 cu.yd.

Proposals must be submitted on the form furnished by the Board and must be accompanied by certified check payable to the Treasurer of the Ozark Trail Road Improvement District, for not less than 5 per cent. of the total amount of the bid.

All requests for information should be addressed to Morgan Engineering Company, Memphis, Tennessee. Specifications and a general map of the district will be furnisned on request without charge. Detailed plans will be supplied at cost.

The right is reserved to reject any or all bids and to waive any informality in the bids received.

BOARD OF COMMISSIONERS,
OZARK TRAIL ROAD IMPROVEMENT DISTRICT,
By W. H. DILATUSH, Secretary.
MORGAN ENGINEERING COMPANY,
Engineers.

OFFICIAL PROPOSALS

Bids: May 20.

Laundry Machinery, Motors, Etc.

Ward's Island, N. Y.

Sealed proposals for Laundry Machinery and Motors, Manhattan State Hospital, Ward's Island, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, May 20, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 3235. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Manhattan State Hospital, Ward's Island, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.
Dated May 7, 1919.

E. S. ELWOOD,
Secretary State Hospital Commission.

Bids: May 26.

Sewers

Coatesville, Pa.

Sealed proposals will be received by the City Council of the City of Coatesville up to 8 P.M. on the 26th of May, 1919, for the construction of storm water and sanitary sewers.

The work to be done is approximately as follows:

STORM SEWER

622 ft. 24 in. vitrified sewer pipe.
570 ft. 24 in. vitrified sewer pipe.
25 ft. 15 in. vitrified sewer pipe.
350 ft. 12 in. vitrified sewer pipe.
3 Manholes.
13 Inlets.

SANITARY SEWER

250 ft. 8 in. vitrified sewer pipe.
1 Flush tank.

All bids must be accompanied by a certified check in an amount of ten per cent. of the amount bid.

A surety bond in an amount equal to fifty per cent. of the contract price will be required from the successful bidder.

The contractor will be required to comply with all the provisions of the Workman's Compensation Act of the State of Pennsylvania.

The City reserves the right to reject any and all bids or to award the contract as may appear to be for the best interests of the City.

Plans, specifications and proposals are on file in the office of the City Engineer, Coatesville, Pa., and copies of the same may be obtained on a deposit of $5.

WILLIAM S. G. COOK,
City Clerk.
CHAS. A. NILES,
City Engineer.

Bids: May 29.

Sewage Treatment Works

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control until 1 P.M., May 29 (changed from May 22 to May 29), for the construction of Sewage Treatment Works for the Weston State Hospital, Weston, W. Va. The work contemplated comprises the construction of a sewage pumping station equipped with two electric motors, 2 centrifugal pumps and automatic control equipment. Also the construction of a sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant. Copies of plans and specifications and blank proposals may be examined or obtained at the office of J. S. Lakin, Member, State Board of Control, Charleston, W. Va., or at the office of Charles E. Collins, Consulting Engineer, Drexel Building, Philadelphia.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which deposit will be refnuded upon the return of the plans and specifications in good condition. Each proposal must be enclosed in a sealed envelope endorsed on the back "Proposal for Constructing Sewage Treatment Works," and addressed to J. S. Lakin, Member, State Board of Control, and delivered at his office not later than 1 P.M., Thursday, May 29, at which time and place bids will be publicly opened and read. The Board reserves the right to reject any or all bids.

J. S. LAKIN, Member,
State Board of Control.

Bids: June 2

Fireproofing

Trenton, N. J.

Sealed proposals for fireproofing dumbwaiter shafts and stairways, New Jersey State Hospital, Trenton, New Jersey, will be received at the Department of Architecture, 142 West State Street, Trenton, New Jersey, at twelve o'clock on Monday, the second day of June, 1919, at which time they will be publicly opened and read.

Proposals must be sealed and addressed to the State Architect, and marked as above. Each proposal must be acompanied by a certified check drawn to the bidder's order and properly endorsed for an amount equal to at least five per cent. (5%) of the amount of the bid.

The right to reject any or all bids is reserved.

The successful bidder, after contract is awarded, will be required to furnish a satisfactory surety bond in the full amount of the contract price to guarantee the fulfillment of the conditions of his contract.

Plans and specifications may be obtained upon application to the Department of Architecture on deposit of $25.00, this amount to be returned to bidder upon return of plans and specifications in good order.

FRANCIS H. BENT,
State Architect.

Bids: May 27.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Baltimore, Md.

BALTIMORE COUNTY, CONTRACT NO. B-31: FEDERAL AID PROJECT, NO. 26—One section of the Hanover Pike from Hitshue's Corner, Reisterstown, to near Woodensburg, for a distance of 2.00 miles. Concrete.

CECIL COUNTY, CONTRACT NO. Ce-28: FEDERAL AID PROJECT NO. 18—One section of State Highway from the end of the concrete road near Harrisville to the Eastern Corporate Limits of Rising Sun, for a distance of 2.08 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-22—One section of State Highway through Aberdeen from the western town limits to Baltimore & Ohio Railroad crossing and from Pennsylvania Railroad crossing to the eastern town limits, for a distance of 3.92 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-23: FEDERAL AID PROJECT NO. 17—One section of State Highway from Jarrettsville to Bethel Church near Cathcart, for a distance of 2.60 miles. Concrete.

GARRETT COUNTY, CONTRACT NO. G-13: FEDERAL AID PROJECT NO. 4—One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 27th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 9th day of May, 1919.

FRANK H. ZOUCK, Chairman.
CLYDE H. WILSON, Secretary.

Bids: June 9.

Pumping Equipment

Sarasota, Fla.

The City of Sarasota, Fla., will receive bids sealed, and to be filed with the City Clerk, on or before 7:30 o'clock on Monday, June the 9th, 1919, for the furnishing and erecting complete, on foundations to be determined by the class of machinery selected later, as follows, 3 Internal combustion engines, fuel oil as a motive power, 2 of 150-H.P. 1 of 100-H.P. To be D.C. to Generators, Exciters, Air to be furnished in accordance to Under-writers Specifications, two (2) compressors, Complete circulating system, Switchboard, Two-Three Stage rotary pumps, with 25 ft. suction and against a 350 ft. head, D.C. to have a capacity of 500 U. S. Gallons per minute each. Motors 75 H.P., 220 Volts, three phase, sixty cycle, slip ring type, all on one C. I. Base. All to be complete and installed in accordance with guarantees that are called for. Specifications $2.00. All rights recerved.

E. J. MESSER,
Commissioner of Public Works.
PAUL THOMPSON,
City Clerk.

WILBUR A. GINN,
Engineer in charge of works.

Bids: May 27.

Concrete Road

Darien, Conn.

Sealed proposals for approximately one and one-fourth miles of concrete road will be received at the office of the Superintendent of Highways and Bridges, Darien, Conn., until two o'clock P.M., May 27tn, 1919.

A surety company bond or certified check in the amount of $500.00 must accompany each proposal.

The successful bidder will be required to execute a construction bond in the amount of $40,000.00 and start work within ten days after notice of award.

Only contractors experienced in the construction of concrete roads are asked to submit proposals.

Plans, specifications and proposal forms on file at above office.

HORACE B. OLMSTED.
Supt. of Highways and Bridges.

Bids: May 28.

Road Reconstruction

Johnstown, Pa.

Philadelphia.

Sealed proposals addressed to the Supervisors of East Carroll Township, Cambria County, Penn., in care of the County Controller, Ebensburg, Penn., will be received up until 10 o'clock, A.M., and publicly opened and read in the Commissioners' office at 20.30 o'clock A.M., on the 28th day of May, A. D. 1918, for furnishing all labor and material for the reconstruction of (7) seven miles and 152 ft. in East Carroll Township, Cambria County, Penn., from Patton to Carrolltown and from Bradley Junction to 1 mile south of Carrolltown, with a sixteen foot roadway of vitrified brick paving block on a concrete base and curb.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, Engineer for East Carroll Township, Leader Building, Johnstown, Penn. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. oCntractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Board of Supervisors and County Commissioners, amount of which must be equal to the gross amount of the contract.

The Supervisors reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 2,775,000 No. 1 repressed vitrified paving blocks, f.o.b. cars nearest point of delivery to work.

By order of Charles Yeckley, T. B. Airhart, Herman Illig, Supervisors of East Carroll Township, Cambria County, Penn.

O. P. THOMAS,
Engineer.

Bids: May 26.

Concrete Road Work

LAKE CO., ILLS.

Waukegan, Ill., May 12, 1919.

Sealed proposals will be received by the undersigned for the improvement of Belvidere Road from Milwaukee Ave. to Volo, in Lake County, by grading, draining and paving with concrete, until 10:30 o'clock A.M., Friday, May 23rd, 1919, and publicly opened. Separate proposals will be received for the cement work until 10:30 o'clock A.M., Monday, May 26th, 1919.

The work is divided into three sections, as follows:

Sec. G—15 D, 53,760 Sq.Yds. 18′ Portland Cement Pavement.

Sec. H—15 D, 27,300 Sq.Yds. 16′ Portland Cement Pavement.

Sec. I—15 D, 38,133 Sq.Yds. 16′ Portland Cement Pavement.

Bidders may submit multiple bids for two or three sections.

INFORMATION: Work will be done under the 1919 Specifications of the State Highway Department, together with Supplementary Specifications and plans prepared by the County Superintendent of Highways.

A certified check for at least five (5) per cent. of amount of the bid, payable to the County Treasurer of Lake Co., Ill., shall accompany each bid.

Plans and specifications may be examined at the following offices:

State Highway Dept., Springfield, Ill.

State District Engineer's Office, Aurora, Ill.

County Superintendent of Highways' office, Waukegan, Ill.

Plans and specifications will be sent by the Co. Supt. or taken from his office upon request and deposit of $20.00, of which $13.00 will be refunded upon their return. When taken from office a charge of $3.00 a day will be made.

Proposal forms, notice to contractors and copies of Superintendent's estimate may be obtained from the County Superintendent's office.

The Road and Bridge Committee reserves the right to reject any or all proposals and to waive technicalities subject to approval of the State Highway Dept.

By order of the Lake Co.

ROAD AND BRIDGE COMMITTEE

CHAS. E. RUSSELL,
County Superintendent of Highways.

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—another bid

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". . . the advertisements may be published in prominent engineering journals . . ."

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0048

Put Public Buying on an Efficiency Basis

Now, more than ever before, it is important that those having contracts to let, whether for new work or the furnishing of machinery or supplies, should consider the best methods of securing extensive competition and low bids.

Thousands of reliable contractors and manufacturers constantly seek opportunities to bid on contracts for public work or supplies. They compete for it. That keeps public expenditures down. It makes the taxpayers' money go farther. It puts public buying on an efficient basis. It makes local bidders figure more closely.

These contractors and manufacturers naturally seek news of contracts where it is most plentiful. They read

ENGINEERING NEWS-RECORD

A Consolidation of Engineering News, Engineering Record and the Contractor

the best known and most widely read papers used for the advertising of contracts to be let. Practically every worth-while contractor and manufacturer who wants to figure on public contracts reads Engineering News-Record. No guessing. No uncertainty. Engineering News-Record, with its circulation of 33,000 copies weekly, reaches practically *all* the men who would be interested in advertised contracts.

Proposal Advertising Rate, $3.60 an inch an issue. (About 10 cents per thousand circulation.)

As a government, state or municipal engineer, or public official you should use this means of giving your taxpayers the biggest value for their money. Advertise your contracts in the News-Record—the one nationally recognized medium for this class of advertising.

Look at the Proposals in this issue and see how other communities use it.

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OFFICIAL PROPOSALS

Bids: June 4.

Construction, Heating, etc.

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Additional Quarters for Acute Patients, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M., on Wednesday, June 4, 1919, w hen they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3219, 3239, 3240, 3241. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1715, Tribune building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. P. Pilcher, Capitol, Albany, N. Y.

Dated: May 7, 1919.

B. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: May 27.

Sanitary Sewers, and Pump Stations

Meadville, Penn.

Sealed proposals for the construction of approximately two miles of sanitary sewers will be received at the office of the undersigned until 5 P.M., Tuesday, May 27, 1919. Also for the construction of a sewage pump station, including equipment. Equipment consisting of 2 twelve horsepower motors, 2 air compressors, 1 air tank and 1—200 gallon ejector. Separate proposals to be made on sewers and pump station. Bond or certified check for $2500 must be submitted with each proposal. Plans and specifications will be furnished by the City Engineer of Meadville, a deposit of $10 being required, to be remitted upon return of the plans in good condition within ten days after receipt of same by bidder. The right to reject any and all proposals is hereby reserved.

FRED C. KIEBORT,
City Clerk,
Meadville, Penn.

OFFICIAL PROPOSALS

Bids: May 27.

Sanitary Sewers

Town of Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on a number of side streets will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., on May 27th, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are:
10,700 ft. of trench of various depths.
2,000 ft. of 6" sewer.
8,700 ft. of 8" sewer.
35 manholes.

The time of completion is limited to 120 calendar days.

Pamphlets containing Information for Bidders, For mof Proposal, Agreement and Specifications, can be obtained from the Town Engineer on Payment of $2.00, which will be refunded on the return of the pamphlet in good order. Sets of blue prints, if desired, will be furnished to bidders at cost.

A certified check for $2000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

EMIL DIEBITSCH,
Mayor and Commissioner of
Streets and Public Improvements.
ELIOT N. SMITH,
Town Engineer.

Bids: June 5.

Grading

Fayette County, West Virginia.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until June 5th, 1919, for grading one section of County Highway of approximately 3.0 miles, from Fayette to Lansing, containing 45,000 cu. yds. of excavation. About 30 per cent rock. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications, which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

By order o fthe County Court of Fayette County, West Virginia.

J. K. McGRATH, Road Engineer.
H. O. BOLEY, President.
R. J. STEGALL, Clerk.

OFFICIAL PROPOSALS

Bids: May 21.

Road Construction

Belvidere, N. J.

Notice is hereby given that sealed bids will be received by The Board of Chosen Freeholders of the County of Warren for the construction of the Hope-Bridgeville Road, Section No. 3, in the Township of White, in the County of Warren with a reinforced concrete surface; estimated amount of surface pavement required is 10,890 square yards, and opened and read in public at the office of the Board in the Court House at Belvidere, N. J., on Wednesday, May 21, 1919, at 11 o'clock A.M.

Drawings, specifications and forms of bid, contract and bodn for the proposed work, prepared by H. W. eVtter, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at the Court House, Belvidere, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Amzi H. Lantz, Director, Board of Chosen Freeholders of the County of Warren, Belvidere, N. J., and must be accompanied by a certified check for not less than $1000.0 0and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the oBard of Chosen Freeholders of the County of Warren.

MORRIS S. FAUST, Clerk.

Bids: May 24.

Paving

Duquesne, Pa.

Sealed proposals directed to City Clerk of Duquesne, Pa., will be received at his office in the City Hall, until 5 P.M., Saturday, May 24th, 1919, and publicly opened at a meeting of Council to be held on Monday, May 26th, 1919, at 9:30 A.M., for the furnishing of al labor and amterials required to construct the pavement, curbing, grading and drainage of Center Street between South Duquesne Ave. and Crawford St., having approximate quantities as shown on letting plans.

Alternate bids will be received on Legonier or granite block on bank slag foundation, and Legonier or granite block on concrete base. Certified check for 5% of amount of bid must accompany proposal. Specifications, proposal blanks, and detailed information concerning proposed work, will be on file at the City Engineers office in City Hall, on and after aMy 17th, 1919.

The right is reserved to reject any or all bids.

E. C. KASTEN, Controller.

HERE IS WHY

Swart has a distinctly better service to offer in securing your contract bonds. The better part is the engineering experience. Your case is presented clearly to the underwriters.

TRY ME OUT
No Extra Charge
HARMON V. SWART
19 Liberty Street, New York

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in ENGINEERING NEWS-RECORD?

In the answers to the foregoing questions you will find unquestionable proof that

1—**Advertised Contracts** are the accepted form of public letting to insure the awarding of contracts free of prejudice.

2—**Advertised Contracts** guarantee the greatest possible saving through maximum competition and that—

3—ENGINEERING NEWS-RECORD is universally recognized as the **one** dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

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Bids: May 28.

Highway Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 11 o'clock A.M., May 28, 1919, for the road work on the National and the Dixie Highways designated by county and section below. All bids shall be on regular forms furnished by the Department.

Plans for all the work may be examined in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois. Plans may also be examined in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Building, Paris, Illinois. Plans will not be sent to prospective bidders, but upon making a deposit with the District Engineer, they may be obtained for temporary use while inspecting the conditions attending the work in question.

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3, or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

NEWS HIGHWAY WORK TABLE ....

Route	County	Sec.	Width Feet	Approx. Length Feet
National Highway	Clark	D-15d	16	17,868.0
National Highway	Clark	A	16-18	29,200,.0
National Highway	Clark	B	16-18	24,242.0
National Highway	Clark	C	16-18	23,736.0
National Highway	Clark	D	18	26,756.0
National Highway	Cumberland	F-15d	16	17,218.0
National Highway	Cumberland	E	16	24,165.0
National Highway	Cumberland	F	16	19,900.0
National Highway	Cumberland	G	16	20,900.0
National Highway	Cumberland	H	16	28,700.0
Dixie Highway	Will	8	18	24,800.0
Dixie Highway	Will	9	18	18,600.0
Dixie Highway	Will	10	18	15,200.0
Dixie Highway	Will	H-15d	18	4,453.0

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer.

By Order of the Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: June 3.

Vitrified Brick for Paving

Saranac Lake, N. Y.

Bids will be received until June 3, 1919, for furnishing vitrified paving brick for 1800 sq.yd. of pavement. Submit samples.

HARRY HULL, Engineer.

Address: S. A. MILLER, Clerk,
Village of Saranac Lake, N. Y.

Bids: May 27.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Baltimore, Md.

BALTIMORE COUNTY, CONTRACT NO. B-31: FEDERAL AID PROJECT, NO. 26—One section of the Hanover Pike from Hitshue's Corner, Reisterstown, to near Woodensburg, for a distance of 2.00 miles. Concrete.

CECIL COUNTY, CONTRACT NO. Ce-28: FEDERAL AID PROJECT NO. 18—One section of State Highway from the end of the concrete road near Harrisville to the Eastern Corporate Limits of Rising Sun, for a distance of 2.08 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-22—One section of State Highway through Aberdeen from the western town limits to Baltimore & Ohio Railroad crossing and from Pennsylvania Railroad crossing to the eastern town limits, for a distance of 3.92 miles. Concrete.

HARFORD COUNTY, CONTRACT NO. H-23: FEDERAL AID PROJECT NO. 17—One section of State Highway from Jarrettsville to Bethel Church near Cathcart, for a distance of 2.60 miles. Concrete.

GARRETT COUNTY, CONTRACT NO. G-13: FEDERAL AID PROJECT NQ. 4—One section of State Highway from Oakland toward Hutton via Crellin, for a distance of 2.12 miles. Concrete.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 27th day of May, 1919, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of five hundred ($500) dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By Order of the State Roads Commission this 9th day of May, 1919.

FRANK H. ZOUCK,
Chairman.

CLYDE H. WILSON,
Secretary.

Bids: May 31.

Pumping Equipment

Wheeling, W. Va.

On May 31st, 1919, between the hours of 10 a.m. and 1 p.m., S. G. Smith, Receiver of the Benwood-McMechen Consolidated Water Company will receive bids on two (2) motor driven centrifugal pumps.

For detailed information and specification apply to Leo Hudson, Engineer, 801 House Building, Pittsburgh, Pa., and local bidders can secure same from Mr. Smith. The right is reserved to reject any or all bids.

S. G. SMITH, Receiver.

Bids: May 28.

Road Reconstruction

Johnstown, Pa.

Philadelphia.

Sealed proposals addressed to the Supervisors of East Carroll Township, Cambria County, Penn., in care of the County Controller, Ebensburg, Penn., will be received up until 10 o'clock, A.M., and publicly opened and read in the Commissioners' office at 20.30 o'clock A.M., on the 28th day of May, A. D. 1918, for furnishing all labor and material for the reconstruction of (7) seven miles and 152 ft. in East Carroll Township, Cambria County, Penn., from Patton to Carrolltown and from Bradley Junction to 1 mile south of Carrolltown, with a sixteen foot roadway of vitrified brick paving block on a concrete base and curb.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, Engineer for East Carroll Township, Leader Building, Johnstown, Penn. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. oCntractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Board of Supervisors and County Commissioners, amount of which must be equal to the gross amount of the contract.

The Supervisors reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 2,775,000 No. 1 repressed vitrified paving blocks, f.o.b. cars nearest point of delivery to work.

By order of Charles Yeckley, T. B. Airhart, Herman Illig, Supervisors of East Carroll Township, Cambria County, Penn.

O. P. THOMAS,
Engineer.

Bids: May 27.

Road Construction

Darien, Conn.

Sealed proposals for approximately one and one-fourth miles of reinforced concrete, biturminous concrete or warrenite pavement will be received at the office of the Superintendent of Highways and Bridges, Darien, Conn., until two o'clock P.M., May 27, 1919.

A surety company bond or certified check in the amount of $5000 must accompany each proposal.

The successful bidder will be required to execute a construction bond in the amount of $40,000, and start work within ten days after notice of award.

Only contractors experienced in the construction of the above types of road are asked to submit proposals.

Plans, specifications and proposal forms on file at above office.

HORACE B. OLMSTED,
Supt. of Highways and Bridges.

OFFICIAL PROPOSALS

Bids: June 2, 1919.

Public Water Supply

MUNICIPAL BOARD

Newark, N. Y.

Notice is hereby given that sealed proposals for the construction of water supply improvements for Newark, N. Y., will be received at the office of the Municipal Board of Newark, N. Y., until 10 o'clock A.M., June 2, 1919, and then publicly opened.

Description of work to be done:

To construct an earthen dam and dikes across Case Creek and the adjoining valley at a point about two and one half (2½) miles southeast of Clifton Springs, N. Y. The earthen dam and dikes will contain approximately three thousand (3000) yards of concrete and thirty thousand (30,000) yards of earth embankment, to construct and furnish all the material for a million gallon mechanical filtration plant, to be built of reinforced concrete and brick, to haul and lay about thirty-eight thousand (38,000) feet of fourteen (14) inch cast iron pipe, to furnish about one thousand seven hundred (1700) tons of fourteen (14) inch cast iron pipe. Separate bids will be received on each division of the work.

Detailed plans and specifications of the work may be seen for examination at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of Mr. Staniland Scarth, Municipal Board, Newark, N. Y. Plans and specifications may be obtained for the sum of $10, which will be returned upon the return of the plans and specifications in good condition.

A certified check for five per cent. (5%) of the amount of the bid made, payable to the order of the Municipal Board, must accompany each proposal. The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes furnished for that purpose with the specifications. Only sealed bids will be considered.

All bids received will be retained by the Municipal Board and will not be returned to the contractors.

GEO. A. BURNHAM,
Chairman Municipal Board.

Attest:
FRANK J. BALTZEL,
Clerk Municipal Board.

Bids: June 4.

Pavement Construction

Village of Bradford, Ohio.

Sealed proposals will be received by W. Lee Hook, Village Clerk, for the construction approximately of:

10,500 cu.yd. grading.
21,600 sq.yd. pavement (all permanent (types).
13,500 lin.ft. stone or concrete curb.
9,800 lin.ft. sewers (6 in. to 24 in.).

in said Village until 12 o'clock noon on the 4th day of June, 1919, and publicly opened and read at the Council Chamber of the Village of Bradford, Ohio.

Plans and specifications may be seen at the Office of the Village Clerk, at the Office of the Engineers or may be obtained from the Engineers upon payment of $5, no refund.

Certified check, $1000, payable to Village Clerk.

The Council reserves the right to reject any or all bids.

W. LEE HOOK, Village Clerk.

THE L. A. BOULAY CO., Engineers,
1250 Nicholas Building,
Toledo, Ohio.

OFFICIAL PROPOSALS

Bids: May 28.

Syphon Duplication

Jersey City, N. J.

Sealed proposals for furnishing and laying of 72-in. steel water pipe between Boonton Reservoir and Jersey City, as follows: Section No. 1, to duplicate the existing syphons between Boonton Reservoir and Passaic River at Lyndhurst; and Section No. 2, to duplicate the existing syphons between the Passaic Rivert at Lyndhurst and Summit Avenue Reservoir at Jersey City, will be received by the Board of Commissioners of Jersey City, N. J., in the Assembly Chamber of the City Hall, Jersey City, N.J.,

WEDNESDAY, MAY 28, 1919,

at 2 P.M., at which place and time they will be publicly opened.

Proposals must be accompanied by the consent in writing of a surety company authorized to do business according to the laws of the State of New Jersey, that, should the proposal be accepted it will become surety in the full amount of the contract, as provided in specifications and in Chapter 75, P. L. 1918, of the State of New Jersey.

Copies of the plans, proposal form, specifications and forms of bond and contracts, can be seen at the office of Frank A. Dolan, City Clerk, City Hall, Jersey City, N. J., or may be seen and obtained at the office of Michael I. Fagen, Director, Department of Streets and Public Improvements, City Hall, Jersey City, N. J., or at the office of Mr. Clyde Potts, Consulting Engineer, 30 Church Street, New York City, by prospective bidders, upon depositing twenty-five ($25) dollars, which sum will be refunded on return of the plans and specifications within ten days after the contract has been awarded, if same are in good condition when returned.

The Board of Commissioners of Jersey City reserves the right to reject any and all proposals.

By Order of the Board of Commissioners of Jersey City.

FRANK A. DOLAN,
City Clerk.

Bids: June 9.

Pumping Equipment

Sarasota, Fla.

The City of Sarasota, Fla., will receive bids sealed, and to be filed with the City Clerk, on or before 7:30 o'clock on Monday, June the 9th, 1919, for the furnishing and erecting complete, on foundations to be determined by the class of machinery selected later, as follows, 3 Internal combustion engines, fuel oil as a motive power, 2 of 150-H.P. 1 of 100-H.P. To be D.C. to Generators, Exciters, Air to be furnished in acordance to Under-writers Specifications, two (2) compressors, Complete circulating system, Switchboard, Two-Three Stage rotary pumps, with 25 ft. suction and against a 350 ft. head, D.C. to have a capacity of 500 U. S. Gallons per minute each. Motors 75 H.P., 220 Volts, three phase, sixty cycle, slip ring type, all on one C. I. Base. All to be complete and installed in accordance with guarantees that are called for. Specifications $2.00. All rights reserved.

E. J. MESSER,
Commissioner of Public Works.
PAUL THOMPSON,
City Clerk.

WILBUR A. GINN,
Engineer in charge of works.

OFFICIAL PROPOSALS

Bids: June 4.

Construction, Heating, etc.

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Additional Quarters for Acute Patients, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M., on Wednesday, June 4, 1919, w hen they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications No. 3219, 3239, 3240, 3241. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, Room 1715, Tribune building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. P. Pilcher, Capitol, Albany, N. Y.

Dated: May 7, 1919.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Bids: May 26.

Water Main and Appurtenaces

Coatesville, Pa.

Sealed proposals will be received by the Mayor and members of the Council of the City of Coatesville, Pa., at 8 P.M., Monday, May 26, 1919, for furnishing and laying approximately 1400 ft. of 12 in. cast iron, class B, water main and appurtenances.

The work includes the following approximate quantities:

58 Tons 12 in. (Class B) pipe.
4 Tons 6 in. (Class B) pipe.
7 12 in. by 6 in. Tees.
8 6 in. Valves.
2 12 in. Valves.
4 Fire hydrants.
3 6 in. to 4 in. reducers.

Plans, specifications and blank forms for bidders can be obtained at the office of the City Engineer, Third Ave. and Chestnut Street for $5, which will be refunded upon return of the plans and specifications.

All bids must be submitted on blanks furnished by the City and accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workman's Compensation Act of Pennsylvania.

The Council reserves the right to reject any or all bids or to award the work as may appear to be for the best interests of the City.

WILLIAM S. G. COOK,
City Clerk.

CHAS. A. NILES,
City Engineer.

Bids: May 27

Sanitary Sewers

Town of Nutley, N. J.

Sealed bids for furnishing labor and material and constructing vitrified pipe sanitary sewer on a number of side streets will be received by the Town Clerk, Town Hall, Nutley, N. J., at 8:15 P.M., on May 27th, 1919, at which time they will be publicly opened and read by the Board of Commissioners.

The principal items of the contract are:

10,700 ft. of trench of various depths.
2,000 ft. of 6" sewer.
8,700 ft. of 8" sewer.
35 manholes.

The time of completion is limited to 120 calendar days.

Pamphlets containing Information for Bidders, For mof Proposal, Agreement and Specifications, can be obtained from the Town Engineer on Payment of $2.00, which will be refunded on the return of the pamphlet in good order. Sets of blue prints, if desired, will be furnished to bidders at cost.

A certified check for $2000 must accompany each bid and a bond for the full amount of the bid will be required for the faithful performance of the work.

EMIL DIEBITSCH,
Mayor and Commissioner of
Streets and Public Improvements.
ELIOT N. SMITH,
Town Engineer.

Bids: June 2

Fireproofing

Trenton, N. J.

Sealed proposals for fireproofing dumbwaiter shafts and stairways, New Jersey State Hospital, Trenton, New Jersey, will be received at the Department of Architecture, 142 West State Street, Trenton, New Jersey, at twelve o'clock on Monday, the second day of June, 1919, at which time they will be publicly opened and read.

Proposals must be sealed and addressed to the State Architect, and marked as above. Each proposal must be acompanied by a certified check drawn to the bidder's order and properly endorsed for an amount equal to at least five per cent. (5%) of the amount of the bid.

The right to reject any or all bids is reserved.

The successful bidder, after contract is awarded, will be required to furnish a satisfactory surety bond in the full amount of the contract price to guarantee the fulfillment of the conditions of his contract.

Plans and specifications may be obtained upon application to the Department of Architecture on deposit of $25.00, this amount to be returned to bidder upon return of plans and specifications in good order.

FRANCIS H. BENT,
State Architect.

PROPOSALS FOR CONCRETE SUPERSTRUCTURE.—U. S. Engineer Office, 508 Federal Building, Chicago, Ill. — Sealed proposals will be received here until 10 A.M., May 26, 1919, and then opened, for constructing concrete superstructure on breakwater, at Calumet Harbor, Ill. and Ind. Further information on application.

U. S. ENGINEER OFFICE, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., May 28, 1919, and then opened for constructing Lock and Abutment for Dam No. 34, Ohio River, near Chilo, Ohio. Further information on application.

Bids June 2

ROAD WORK

Osceola, Arkansas

203½ Miles Graded Roads, 1,448,660 Cu. Yds. of Excavation, as described in the following advertisements. For further information address Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 12½ miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of Osceola & Little River Road Improvement District No. 1, Mississippi County, Ark., and publicly opened at Osceola Ark., for the construction of the following approximate quantities:

90,000	cubic yards of earth excavation
7	acres clearing and grubbing
300	feet of 18 inch pipe in place
600	" " 24 " " " "
180	" " 35 " " " "
48	cubic yards concrete in place in headwalls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 75 miles of graded earth roads, will be received at Osceola, Ark., until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Luxora & Little River Road Improvement District No. 2, Mississippi County, Arkansas, for the construction of the following approximate quantities:

650,000	cubic yards of earth excavation
197	acres clearing and grubbing
107	acres of grubbing
3,180	lineal feet pipe in place, 18 inch
1,230	" " 24 inch pipe in place
45	" " 36 " " " "
223	cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any or all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 26 miles of graded earth roads will be received until 2 o'clock P.M. on Monday, June 2, 1919, by the Board of Commissioners of the Burdette Road Improvement District No. 3, Mississippi County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000	cubic yards of earth excavation
45	acres of clearing and grubbing
5	acres of grubbing
20-18	inch pipe in place
30-24	" " " "
75	cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete or corrugated iron. Bids must be accompanied by a certified check or bidder's bond for at least five per cent. of the bid. The Commissioners reserve the righ to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 25 miles of graded earth roads will be received until 2 o'clock P.M., Monday, June 2, 1919, by the Board of Commissioners of Poinsett County Road Improvement District No. 3, Poinsett County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000	cubic yards of earth excavation
20	acres of clearing and grubbing
25	acres of grubbing
5-35	inch pipe in place
10-30	" " " "
15-24	" " " "
32-18	" " " "
95	cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 45 miles of graded earth roads, will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Road Improvement District No. 5, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

140,000	cubic yards of earth excavation
136	acres clearing and grubbing
1,530	lineal feet 18 inch pipe in place
480	" " 24 " " " "
70	cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 20 miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Cimmissioners of Etowah Road Improvement District No. 2, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

125,000	cubic yards of earth excavation
75	acres of clearing and grubbing
60	acres of grubbing
35-18	inch pipe in place
20-24	" " " "
2-36	" " " "
100	cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffiin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Griffin, Georgia.

G. M. HARRINGTON,
City Engineer, Griffiin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

Bids: May 26.

Street Reconstruction

Salem, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council of the City of Salem for the reconstruction of Streets in the City of Salem in the County of Salem, N. J., as follows:

Macadam Foundation.......	4,366 Sq.Yds.
Repaired Macadam Foundation	33,924 " "
Bituminous Macadam, Penetration Surface	38,290 " "
Repaired Bituminous Concrete	14,177 " "

and opened and read in public at Council Chamber (Liberty Fire Engine House), Salem, N. J., on Monday, May 26, 1919, at 8 P.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Keasby & Sparks, Engineers, and approved by the State Highway Commission, have been filed in the office of the said engineers at Salem, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Mayor and Common Council of the City of Salem, N. J., and must be accompanied by a certified check for not less than $1000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Mayor and Common Council of the City of Salem, N. J.

(Signed) WM. B. DUNN,
Recorder.

Bids: June 4.

Sanitary Sewers

Garner, Iowa.

Sealed proposals will be received by the Town Clerk in his office in the Town Hall until 2:30 P.M., June 4, 1919, for constructing a system of sanitary sewers and a sewerage disposal plant.

Section A—Disposal Plant, Concrete Tank, Sand Filters, Sludge Bed.

Section B—Outlet main sewer.
3750 lin.ft. of 18 in. pipe.
6 Manholes.

Section C—Lateral Sewers.
1320 ft. of 18 in. pipe.
2952 ft. of 15 in. pipe.
3400 ft. of 12 in. pipe.
3332 ft. of 10 in. pipe.
24285 ft. of 8 in. pipe.
80 Manholes.
24 Flushtanks.

Certified check required, $1000. Arrangements may be made with local banks for cash on each Section as completed. Plans, specifications and forms on file with the Town Clerk or the Town Engineer.

H. V. REED,
Town Clerk.

J. G. THORNE, Town Engineer,
317 Howes Block,
Clinton, Iowa.

Bids: June 5.

Grading

Fayette County, West Virginia.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until June 5th, 1919, for grading one section of County Highway of approximately 3.0 miles, from Fayette to Lansing, containing 45,000 cu. yds. of excavation. About 30 per cent rock. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications, which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

By order o fthe County Court of Fayette County, West Virginia.

J. K. McGRATH, Road Engineer.
H. O. BOLEY, President.
R. J. STEGALL, Clerk.

Bids: May 26.

Sewers

Coatesville, Pa.

Sealed proposals will be received by the City Council of the City of Coatesville up to 8 P.M. on the 26th of May, 1919, for the construction of storm water and sanitary sewers.

The work to be done is approximately as follows:

STORM SEWER

622 ft. 24 in. vitrified sewer pipe.
570 ft. 24 in. vitrified sewer pipe.
25 ft. 15 in. vitrified sewer pipe.
350 ft. 12 in. vitrified sewer pipe.
3 Manholes.
13 Inlets.

SANITARY SEWER

250 ft. 8 in. vitrified sewer pipe.
1 Flush tank.

All bids must be accompanied by a certified check in an amount of ten per cent. of the amount bid.

A surety bond in an amount equal to fifty per cent. of the contract price will be required from the successful bidder.

The contractor will be required to comply with all the provisions of the Workman's Compensation Act of the State of Pennsylvania.

The City reserves the right to reject any and all bids or to award the contract as may appear to be for the best interests of the City.

Plans, specifications and proposals are on file in the office of the City Engineer, Coatesville, Pa., and copies of the same may be obtained on a deposit of $5.

WILLIAM S. G. COOK,
City Clerk.

CHAS. A. NILES,
City Engineer.

Bids: May 29.

Sewage Treatment Works

Charleston, W. Va.

Sealed proposals will be received by the State Board of Control until 1 P.M., May 29 (changed from May 22 to May 29), for the construction of Sewage Treatment Works for the Weston State Hospital, Weston, W. Va. The work contemplated comprises the construction of a sewage pumping station equipped with two electric motors, 2 centrifugal pumps and automatic control equipment. Also the construction of a sewage sedimentation tank, sprinkling filter, sludge bed and chlorinating plant. Copies of plans and specifications and blank proposals may be examined or obtained at the office of J. S. Lakin, Member, State Board of Control, Charleston, W. Va., or at the office of Charles E. Collins, Consulting Engineer, Drexel Building, Philadelphia.

A deposit of Ten Dollars ($10.00) will be required for each set of plans and specifications, which deposit will be refnuded upon the return of the plans and specifications in good condition. Each proposal must be enclosed in a sealed envelope endorsed on the back "Proposal for Constructing Sewage Treatment Works," and addressed to J. S. Lakin, Member, State Board of Control, and delivered at his office not later than 1 P.M., Thursday, May 29, at which time and place bids will be publicly opened and read. The Board reserves the right to reject any or all bids.

J. S. LAKIN, Member,
State Board of Control.

OFFICIAL PROPOSALS

Bids: June 17.

Construction, Heating, etc.

Ossining, N. Y.

CONSTRUCTION WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); Clinic Building (No. 8); and Pump House and Reservoir;

HEATING WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

SANITARY WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

ELECTRIC WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

NEW BOILERS—Two new 400 Hp. Water Tube Boilers,

at Sing Sing Prison, Ossining, N. Y., will be received by Hon. Chas. F. Rattigan, Superintendent of State Prisons, Room 618, Hall of Records Building, Centre and Chambers Streets, New York City, until 2:30 o'clock P.M., on Tuesday, June 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3229, 3230, 3231, 3232, 3233, 3220, 3223, 3226, 3252, 3221, 3224, 3227, 3222, 3225 and 3228. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Warden of Sing Sing Prison, Ossining, N. Y.; at Room 618, Hall of Records, New York City, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: May 14, 1919.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

PROPOSALS FOR CONSTRUCTION, ETC.—Office of Constructing Quartermaster, Mexican Border Project, Camp Travis, Texas.—Sealed proposals will be received here until 10 A.M., June 2, 1919, and then opened, for constructing approximately nine hundred and ninety seven brick, adobe and frame buildings; water and sewer lines, wiring, etc., at approximately thirty posts and camps along Mexican Border in Texas, New Mexico and Arizona. Complete information, plans, specifications, etc., furnished on receipt of certified check for $50.00.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District Engineer, P. O. Box 1017, Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: June 3.

Paving

Emmetsburg, Iowa.

The City of Emmetsburg, Iowa, will receive bids at 1:30 P.M., June 3rd, 1919, for approximately 73,000 square yards of brick, sheet asphalt, asphaltic concrete, or bitulithic pavement, or 82,000 square yards of concrete pavement, together with necessary curb, gutter and grading, etc., and for approximately 26,000 lineal feet of 10-inch to 30-inch storm water sewers, material to be vitrified tile pipe or concrete.

All to be paid for from funds realized from the sale of special assessment bonds.

Certified checks for $25,000.00 required on the paving contract, and $4000.00 on the sewer contract.

The city is desirous of securing responsible bidders not only from the State of Iowa, but from outside of the State of Iowa.

The city reserves the right to reject any and all bids.

General plan, specifications and bidding sheet may be secured from the engineers, Marr, Green & Co., 17 N. LaSalle St., Chicago, Ill., upon application, without charge. A charge of $2.00 for a set of detailed plans of the sewers, and $1.00 for a set of detailed plans of the paving will be made, which sum will not be returned.

MARR, GREEN & CO., Eggineers,
17 N. LaSalle St., Chicago.
T. F. RUTLEDGE, City Clerk.

Bids: June 4.

Paving

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington county, N. J., for the improvement of Section No. 2 of the Moorestown-Camden pike in the township of Chester, in the county of Burlington, with a sheet asphalt surface upon a concrete foundation, estimated amount of surface pavement required is 5717 square yards, of foundation 5717 square yards, and opened and read in public at the court house on Wednesday, June 4, 1919, at 12 noon.

Drawings and specifications and forms of bid, contract and bond for the proposed work, prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at No. 11 Main Street, Mount Holly, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required in the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a surety company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR., Clerk.

OFFICIAL PROPOSALS

Bids: June 6, 1919.

Pavement Construction

Village of Centerburg, Ohio.

Sealed proposals will be received by N. C. Smith, Village Clerk, for the construction approximately of

4600 cu.yds. Grading
8300 sq.yds. Pavement (permanent types)
5500 lin.ft. Stone or concrete curb
1500 lin.ft. Sewers (8" and 10")

in said Village until 12 o'clock noon on the 6th day of June, 1919, and publicly opened and read at the Council Chamber of the Village of Centerburg, Ohio.

Plans and specifications may be seen at the Office of the Village Clerk, at the Office of the Engineers or may be obtained from the Engineers upon payment of $2.00, no refund.

Certified check $500.00 payable to Village Clerk.

The Council reserves the right to reject any or all bids.

N. C. SMITH,
Village Clerk.

THE L. A. BOULAY, Engineers,
1250 Nicholas Building,
Toledo, Ohio.

Bids: June 4.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter; Changing Water Main; and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, June 4, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3243, 3244 and 3245. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Dated: May 12, 1919.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

OFFICIAL PROPOSALS

Bids: June 17.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 17, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 890 lin.ft. of Reinforced Concrete, also 23,075 ft. of Resurfacing with Bituminous Surface Course, in Blair County; 6640 ft. of Plain Concrete in Bradford County; 32,185 ft. of Reinforced Concrete and Hillside Vitrified Brick in Cambria County; 27,940 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 2932 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Chester County; 9067 ft. of Reinforced Concrete in Crawford County; 24,275 ft. of Reinforced Concrete and Hillside Vitrified brick in Cumberland County; 4854 ft. of Bituminous Surface Course on a Concrete Foundation and Vitrified Brick, also 20,200 ft. of Reinforced Concrete, also 9154 ft. of Reinforced Concrete and Hillside Vitrified Brick, and 27,409 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick, or Reinforced Concrete and Hillside Vitrified Brick in Erie County; 37,684 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lancaster County; 39,319 ft. of Reinforced Concrete in Lycoming County; 3678 ft. of either bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 26,400 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Potter County; 6544 ft. of Reinforced Concrete in Warren County and 40,712 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding Blanks and Specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: June 10.

Pumping Plant

MUSCATINE LOUISA DRAINAGE DISTRICT NO. 13

Wapello, Ia.

Sealed bids will be received until one o'clock P.M., June 10, 1919, by the Muscatine-Louisa Drainage District No. 13, at the office of the County Auditor of Louisa County, Wapello, Iowa, for a steam driven pumping plant containing one 36 in. and one 24 in. double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., Peoria, Illinois.

OFFICIAL PROPOSALS

Bids: June 5.

Bridge Construction

STATE OF CONNECTICUT
HIGHWAY DEPARTMENT

Hartford, Conn.

Contractors experienced in constructing difficult foundation work and large concrete bridges are invited to present proposals for the construction of the approaches, substructure and reinforced concrete superstructure of a bridge to be built across the Housatonic River between the towns of Milford and Stratford.

The main structure will be a reinforced concrete design consisting of five ribbed arches of 100 foot clear span and sixty (60) feet in width; two girder approach spans about fifty-two (52) feet in length; and suitable approach embankments. The entire improvement is to be covered with a permanent pavement totaling approximately 2800 feet in length.

Bids will be received by the State Highway Commissioner in his office at the State Capitol at Hartford, Connecticut, until 2 P.M. of the 5th day of June, 1919, at which time they will be publicly opened and read.

A surety company bond or a certified check for one-third (⅓) of the contractor's estimated cost of the bridge must be presented with the bid; the check or bond to be returned after the award and signing of the contract by the lowest responsible bidder.

Upon the execution of the contract, a surety company bond must be filed for the full amount of the contract.

All bids must be made on and in conformity with the form of proposal which with the contract, specifications and bond may be obtained and plans examined at the following places:

Office of the State Highway Commissioner, Hartford, Conn.

Office of Division Engineer, Chamber of Commerce Bldg., New Haven, Conn.

Complete plans and specifications will be furnished to bidders upon payment of ten ($10) dollars. This amount will be refunded upon the return of the same in good condition.

The Highway Commissioner reserves the right to reject any or all bids or to accept any bid which in his judgment is for the best interest of the State of Connecticut, and other interested parties.

CHARLES J. BENNETT,
State Highway Commissioner.

Dated at Hartford, Conn.,
May 5, 1919.

Cast-Iron Pipe

THE CORPORATION OF WATERFORD, IRELAND

Tenders are hereby invited by the Corporation of the City of Waterford, Ireland, from American manufacturers for the supply of 13,000 lin.yd. of 15 in. diameter cast iron water pipes, to stand a vertical pressure of a column of water of 300 ft. The pipes to be delivered at the Quays, Waterford. Waterford is a free port.

Envelopes containing quotations to be endorsed "Water Pipes" and addressed to Thomas F. J. Higgins, Esq., Town Clerk, Town Hall, The Mall, Waterford, Ireland.

Dated this 2nd day of May, 1919.

OFFICIAL PROPOSALS

Bids: June 5.

Reservoir Construction, Pumping Units, Chlorinator

Bellevue, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Bellevue, Ohio, until 12 o'clock noon of the 5th day of June, 1919, and then publicly opened and read for:

(a) The construction of an impounding reservoir requiring about 100,000 cu.yd. of earth excavation and embankments, a low service pumping station 20 ft. x 26 ft. in plan, an 18 in. vitrified tile pipe line between 1500 ft. and 3000 ft. in length and incidental work.

(b) The furnishing and erecting of two gas engine driven centrifugal pumping units each having a capacity of 5000 gallons per minute.

(c) The furnishing and delivering of a chlorinator for disinfecting of the municipal water supply.

Copies of the plans, proposal forms, specifications and forms of bonds can be seen at the office of the Director of Public Service, or can be obtained from that office or from the office of Wm. G. Clark, Consulting Engineer, 1047 Spitzer Bldg., Toledo, Ohio, upon deposit of ten dollars for each set, which will be refunded provided they are returned in good order on or before June 15, 1919.

Each proposal or bid shall be accompanied by a bond executed by the bidder and a surety company satisfactory to the Director of Public Service, in the sum of 10% of the amount of proposal or bid; or in lieu of such bond the bidder may deposit with the Director of Public Service a certified check on a solvent bank in the City of Bellevue, Ohio, payable to the order of the Director of Public Service equal in amount to such bond.

The Director of Public Service reserves the right to reject any and all bids, waive any informalities in any bid, or to accept any bid which he may deem advantageous to the City of Bellevue.

By direction of

O. C. LITZKEY,
Director of Public Service.

Bids: June 3.

Creek Widening

New Castle, Pa.

Sealed proposals will be received at the office of the City Clerk, City Building, New Castle, Pa., up until 10 o'clock, Tuesday morning, June 3, 1919, providing for the change, alteration and relocation of the course and channel of the Neshannock Creek within the City of New Castle and the widening of the said channel for said purpose, the reëstablishment of the line on the west or right bank of said creek, for the purpose aforesaid, between the Rosena Furnace Dam on said creek and a point on the bridge over said creek at South Jefferson Street and opposite the south line of said street and the erection of a cement wall along the right bank of said creek. Work to be done in accordance with plans and specifications approved by Council on file in the office of the City Engineer. Each proposal to be accompanied by a certified check for $1000, made payable to the City Clerk and marked, "Neshannock Creek Widening."

Right reserved to reject any or all bids.

C. ED. BROWN, City Clerk.

Bids: June 3.

Paving

Columbia, S. C.

Sealed bids will be received until 10 A.M., Tuesday, June 3, 1919, by the City of Columbia, S. C., for the paving of Assembly Street from Gervais to Taylor Street, consisting of approximately 17,000 sq.yd. of street paving and 5000 lin.ft. of curb.

Proposals will be considered for paving with sheet asphalt, bitulithic, vitrified brick and cement concrete, but the kind of paving will be selected by City Council after proposals are submitted. Each bid must be accompanied by a certified check, drawn to the order of the City Treasurer of Columbia, S. C., or New York draft, to the amount of $500, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract and furnish a bond with approved sureties in the sum of one-half the amount of the contract within ten days after being called upon to do so. Specifications and all available information will be furnished upon application to the City Engineer. The right to reject any or all bids is reserved by the City of Columbia.

T. KEITH LEGARE,
City Engineer.

M. M. RICE, Councilman,
Superintendent of Engineering
and Streets.

Bids: June 9.

Sewage Treatment Works

Pontiac, Michigan.

Sealed proposals will be received at the office of the City Clerk, City Hall, until 1:30 P.M., June 9, 1919, for the construction of the Sewage Treatment Works.

The work contemplated comprises the construction of an outfall sewer, grit chamber, two-story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge, and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Outfall sewer	2,052 lin.ft.
Excavation	34,710 cu.yd.
Reinforced concrete	4.078 cu.yd.
Filter stone	15,700 cu.yd.
C. I. piping	35 tons

Plans and Specifications are on file at the office of the City Clerk, City Hall, and copies may be obtained at the office of Clarence W. Hubbel, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Michigan. A deposit of fifteen dollars ($15) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for fifteen thousand dollars ($15,000).

Separate proposals will be entertained on the Outfall Sewer. A certified check for one thousand dollars ($1000) will be required where proposals are made on outfall sewer only.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the City Clerk on or before 1:30 P.M., June 9, 1919.

The city reserves the right to reject any or all bids.

By order of the City Commission.

C. W. HAM,
City Clerk.

Bids: June 16.

Reinforced Concrete Bridge

Valdosta, Georgia.

Sealed proposals will be received by the Board of Commissioners of Lowndes County, Georgia, at the Court House, Valdosta, Georgia, until 10 A.M., June 16, 1919, for furnishing all material, labor and equipment necessary for the erection of a bridge over the Withlacoochee River, about 5 miles from Valdosta.

The following is a list of the quantities of the work to be done:

40	cu.yd. dry excavation.
155	cu.yd. wet excavation.
1240	lin.ft. wood piles under foundation piers.
880	lin.ft. creosoted piles under foundation piers.
3720	lin.ft. 14 x 14 in. reinforced concrete piles.
812	lin.ft. 10 x 10 in. reinforced concrete piles.
904.37	cu.yd. Class "A" concrete.
463.15	cu.yd. Class "B" concrete.
94,520	lb. reinforcing steel.
3363	sq.ft. hog wire.
6	cast-iron rockers.
12	steel rocker plates.
18	3 x 3 in. metal drains.
120	2 in. tubes, sheet metal.

Plans and specifications are on file at the office of the Board of Comimssioners at Valdosta, Georgia, the State Highway Engineer and the J. B. McCrary Company, the Project Engineers at Atlanta, Georgia. Copies may be obtained from the J. B. McCrary Company, Atlanta, upon receipt of $2.50 to cover the actual cost of reproduction which will be refunded if bona fide bid is made.

Proposals must be submitted on regular forms which will be supplied by the Project Engineers and must be accompanied by a certified check for 5 per cent. of the amount bid.

Payments will be made monthly on basis of 85 per cent. of work done and materials embodied in construction, balance when the work is completed and accepted.

The right is reserved to reject any and all bids and waive all formalities.

BOARD OF COMMISSIONERS OF ROADS
AND REVENUES, LOWNDES
COUNTY, GEORGIA.
(By) B. G. LASTINGER,
Clerk of Commissioners.
THE J. B. McCRARY COMPANY,
Engineers,
Valdosta, Georgia.

Bids: June 11.

Furnishing and Erecting One Twenty-five and One Fifteen Kilowatt Turbo-Generator Set and Switchboard for Mount Royal Pumping Station, Baltimore, Md.

Sealed proposals in duplicate, endorsed bids for furnishing and erecting one twenty-five and one fifteen kilowatt turbo-generator sets and switchboard for Mt. Royal Pumping Station, will be received at the office of the City Register, City Hall, Baltimore, Md., until 12 o'clock noon, June 11, 1919.

Specifications can be obtained at the office of the Water Engineer, City Hall, Baltimore, Md., on and after May 23, 1919. A charge of five dollars ($5) will be made for each set of specifications; this amount will be refunded upon the return of these specifications in good condition before June 30, 1919. Specifications used in making a bid will be considered as returned.

A certified check of the bidder on a clearing-house bank, made payable to the Mayor and City Council of Baltimore, for the sum of five hundred dollars ($500), will be required with each bid.

The successful bidder will be required to give bond to comply with the City Charter respecting contracts.

While bids are asked for on three items the contract will be let as a whole.

The Board of Awards reserves the right to reject any or all bids and to waive technical defects if in its judgment it is to the best interest of the City to do so.

Approved: WALTER E. LEE,
J. BARRY MAHOOL, Water Engineer.
Acting Pres. Board of Awards.

Bids: June 10.

Highway Construction

Schoharie Co., N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Tuesday, June 10, 1919, for Contract 202, for the construction of about 7¾ miles of highways, including clearing, grading, draining, building of culverts and guard-rails, around the Schoharie reservoir, in the Towns of Gilboa and Conesville, Schoharie county, Prattsville, Greene county, and Roxbury, Delaware county, New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Comimssioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: May 29.

Sanitary Sewer

Frederick, Oklahoma.

Sealed bids addressed to the "Honorable Mayor and Council" of the City of Frederick, Oklahoma, and endorsed "Sewer Bid" will be received at the office of the City Clerk until 4 P.M., May 29, 1919, at which time they will be publicly opened and read.

The work consists of furnishing labor and material for the construction and extension of a sanitary sewer system.

Approximate quantities as follows:

Trench excavation 5 ft. to 17 ft. deep, cu.yd.	26,775
6" vitrified pipe, lin.ft.	965
8" vitrified pipe, lin.ft.	34,795
12" vitrified pipe, lin.ft.	1,780
15" vitrified pipe, lin.ft.	7,770
Specials	1,032
Manholes	86

Alternate bids will be received for Cement Sewer Pipe in place of vitrified pipe.

Each proposal must be accompanied by a certified check on a Frederick bank for 5% of amount bid.

Plans and specifications are on file at the office of the City Clerk, and copies of same may be obtained from the engineer uopn payment of $15 therefor.

The City reserves the right to reject all bids, or accept any that may seem best for the City.

D. W. WOMACK, City Clerk.

OFFICIAL PROPOSALS

Bids: June 3.

Paving and Sewering

Butler, Pa.

Sealed proposals directed to the City Clerk of Butler, Pa., will be received at the City Hall until 3 P.M., Tuesday, June 3, 1919, for the paving and sewering of the following streets:

Oak Street, south property line of Polk to Charles Street, approximately 1152 sq.yd.

Summit Street, Fulton to Polk, approximately 1365 sq.yd.

Jefferson Street, Main to east side of Monroe, approximately 6915 sq.yd.

Wayne Street, Main to Viaduct, approximately 1917 sq.yd.

Center Avenue, bridge to west curb line of Lookout Avenue, approximately 4175 sq.yd.

Jefferson Street, sewer approximately 1840 lin.ft. of main sewer and 1150 lin.ft. of laterals.

Wayne Street, sewer, approximately 550 lin.ft. of main sewer and 324 lin.ft. of laterals.

Specifications, proposal blanks and detailed information can be obtained by applying to the City Engineer.

A deposit of five ($5) dollars is required for each complete set of plans and specifications sent out, which will be refunded upon the return of the plans in good condition.

A certified check in the sum of ten (10%) per cent. of the gross bid must accompany the proposal.

The City reserves the right to reject any and all bids.

H. O. CARSON,
City Engineer.

Bids: June 6.

Pavement

Rockford, Ill.

Sealed proposals will be received until two o'clock P.M. June 6, 1919 ,at the office of the President of the Board of Local Improvements of the City of Rockford, Illinois, for the construction of a brick pavement on portions of Elm Street and South Elm Street. Estimated quantities as follows:

4000 cu.yds. excavation, 11,300 sq.yds. brick pavement, 175 ft. curb, 5960 ft. curb and gutter, 2 catchbasins and 16 curb intakes.

Plans and specifications will be furnished upon application to the Public Engineer of the City of Rockford.

ROBERT REW.
President of the Board of Local
Improvements.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: June 5

Concrete Bridges

BUREAU OF HIGHWAYS, PHILADELPHIA, PA.

Sealed bids will be received by the Director of the Department of Public Works up to noon Thursday, June 5th, 1919, and then publically read, for one concrete arch bridge, 86 foot span and 78 feet wide and one flat slab construction bridge, 24 Is incased in concrete, 32 feet clear span and 82 feet wide.

Plans, specifications and proposal sheets may be seen at Room 232 City Hall; a deposit of Twenty Dollars will be required of those taking out plans to be refunded upon return.

The attention of bidders is called to the special requirements contained in the proposal sheet.

GEORGE E. DATESMAN,
Director, Department of Public Works.

Bids: June 9.

Water Main and Sewer Construction

WASHINGTON SUBURBAN SANITARY DISTRICT
CONTRACT NO. 1

Washington, D. C.

Sealed proposals will be received at the office of the Washington Suburban Sanitary Commission, 611 F Street, N. W., Washington, D. C., until Monday, June 9, 1919, at 3 P.M., and then and there opened, for water main and sewer construction in the Hyattsville, Maryland Water and Sewer District, approximately as follows:

6500 lin.ft. 6 in. and 8 in. cast-iron water mains.
7200 lin.ft. 6 in., 8 in. and 10 in. vitrified pipe sewers.
16 fire hydrants.
22 manholes.

Water service and sewer house connections.

Bids must be accompanied by certified check in sum equal to 5% of the amount of the bid.

On and after May 26, plans and specifications may be seen at the Washington office of the Commission, and may be obtained at the office of the Chief Engineer of the Commission, Hyattsville, Maryland, for the sum of two dollars, which will not be refunded.

WASHINGTON SUBURBAN SANITARY
COMMISSION
(By) WILLIAM T. S. CURTIS,
Chairman.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

SPEED
Contractors—your busy season is here! Your contract bonds are important—and speed in getting them is just as vital.
Swart Engineering Service
is as different—as it is quick. Is as quick—as it is dependable.
Let's Get Together
HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

Bids: June 11

Paving

Ithaca, N. Y.—Until June 11 by Board of Public Works, 27,522 sq.yds. paving. Including 22,785 yds. 6 in. cement concrete foundation remainder over old macadam foundation. Also 2600 lineal feet concrete curb. Bids invited for both vitrified brick block and bitulithic. Detailed plans on file with City Clerk and at Engineer's office.

HENRY L. STEWART,
City Engineer.

POSITIONS VACANT

A CAPABLE man wanted as chief of department of hydro-electric and steam power plants, in an organization of municipal and industrial enginers and architects. Fixed salary and liberal share in profits. Main office and field of operations in the South. Address, giving full particulars of training, experience, etc., P-466, Eng. News-Record, Philadelphia.

A CAPABLE man wanted as chief of department of general architecture, in an organization of municipal and industrial engineers and architects. Fixed salary and liberal share in profits. Main office and field of operations in the South. Address, giving full particulars of training, experience, etc., P-467, Eng. News-Record, Philadelphia.

ARCHITECTURAL and structural designers wanted by manufacturing concern in Middle West. Architectural applicants must be experienced and good draftsmen. Structural applicants must have thorough experience with steel, also knowledge of reinforced concrete; only men capable of earning $225.00 per month need apply; positions permanent if you prove satisfactory. P-424, Eng. News-Record, Chicago.

AN industrial firm in western Massachusetts wants competent structural steel draftsmen; men familiar with mill building design preferred. State age, nationality, education, experience, and salary expected. P-525, Eng. News-Record.

A YOUNG man for highway work; one having experience preferred; should be a fair draftsman. At once. P-508, Eng. News-Record, Chicago.

WANTED AT ONCE

Mechanical or Chemical Engineer and Chief Draftsman

wanted by important concern making raw celluloid film and photographic emulsions. Position with big future insured to right men, having a thorough, practical knowledge along these lines and the machinery used. Knowledge of foreign languages preferred, but not necessary. Applications will be held confidential. Address full particulars as to age, experience, salary, to

P496—Engineering News-Record
10th Ave. and 36th St., New York City

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: June 3.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, May 1st, 1919.

Sealed proposals will be received at the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon on Tuesday, June 3rd, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 52-P

For paving Pier 6, East river, borough of Manhattan, New York City.

Contract plans, sheets 1 and 2.

—2—

TERMINAL CONTRACT NO. 113

For furnishing, testing and delivering electric capstans and trolley hoists at various Barge canal terminals.

—3—

TERMINAL CONTRACT NO. 117

For furnishing, testing and delivering battery-charging motor-generator sets, with switchboard panels for Barge canal terminals in New York City.

Plans may be seen and detached specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the stae for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

LEWIS NIXON,
Superintendent of Public Works.

PROPOSALS FOR CONSTRUCTION, ETC.—Office of Constructing Quartermaster, Mexican Border Project, Camp Travis, Texas.—Sealed proposals will be received here until 10 A.M., June 2, 1919, and then opened, for constructing approximately nine hundred and ninety seven brick, adobe and frame buildings; water and sewer lines, wiring, etc., at approximately thirty posts and camps along Mexican Border in Texas, New Mexico and Arizona. Complete information, plans, specifications, etc., furnished on receipt of certified check for $50.00.

OFFICIAL PROPOSALS

Bids: June 17.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,
Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 17, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 890 lin.ft. of Reinforced Concrete, also 23,075 ft. of Resurfacing with Bituminous Surface Course, in Blair County; 6640 ft. of Plain Concrete in Bradford County; 32,185 ft. of Reinforced Concrete and Hillside Vitrified Brick in Cambria County; 27,940 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 2932 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Chester County; 9067 ft. of Reinforced Concrete in Crawford County; 24,275 ft. of Reinforced Concrete and Hillside Vitrified brick in Cumberland County; 4854 ft. of Bituminous Surface Course on a Concrete Foundation and Vitrified Brick, also 20,200 ft. of Reinforced Concrete, also 9154 ft. of Reinforced Concrete and Hillside Vitrified Brick, and 27,409 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick, or Reinforced Concrete and Hillside Vitrified Brick in Erie County; 37,684 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lancaster County; 39,319 ft. of Reinforced Concrete in Lycoming County; 3678 ft. of either bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 26,400 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Potter County; 6544 ft. of Reinforced Concrete in Warren County and 40,712 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding Blanks and Specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

Bids: June 10.

Cast-Iron Pipe

THE CORPORATION OF WATERFORD, IRELAND

Tenders are hereby invited by the Corporation of the City of Waterford, Ireland, from American manufacturers for the supply of 13,000 lin.yd. of 15 in. diameter cast iron water pipes, to stand a vertical pressure of a column of water of 300 ft. The pipes to be delivered at the Quays, Waterford. Waterford is a free port.

Envelopes containing quotations to be endorsed "Water Pipes" and addressed to Thomas F. J. Higgins, Esq., Town Clerk, Town Hall, The Mall, Waterford, Ireland.

Dated this 2nd day of May, 1919.

Bids: June 17.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS, ALBANY, N. Y.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, June 17, 1919, for the improvement of the following highways:

CHENANGO—Three highways: 4.78, 5.57, 5.87.
ERIE—One highway: 5.78.
ESSEX—Two highways: 8.85, 1.09.
FULTON—Three highways: 2.80, 4.90, 1.06.
ONONDAGA—Two highways: 7.45, 3.75.
RENSSELAER—Two highways: 1.44, 4.95.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

BROOME—One highway: 4.70.
CATTARAUGUS—One highway: 2.17.
NASSAU—One highway: 1.57.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

FULTON—One contract, reconstruction.
HERKIMER—One contract, resurfacing.
MONROE—Two contracts, resurfacing.
MONTGOMERY—One contract, reconstruction.
ONEIDA—One contract, timber crib-stone fill.
WESTCHESTER — One contract, reconstruction.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE,
Commissioner.
R. K. FULLER, Secretary.

Bids: June 16.

Hydro-Electric Power Plant Construction

Marquette, Michigan.

Sealed proposals will be received by the City Commission of the City of Marquette at the office of the City Purchasing Agent, until 12 o'clock noon, June 16, 1919, for furnishing all equipment, tools, labor and material required for constructing the following specified improvements, such proposals to be publicly opened and read:

1. A hydroelectric power house, 40 x 97 of concrete and brick, including tail-race excavation in earth and rock;
2. A reinforced concrete surge tank thirty (30) feet diameter and sixty (60) feet high, including foundation;
3. Concrete foundations with timber saddles for a woodstave pipe line 90 in. inside diameter, 1800 ft. long, and 78 in. inside diameter, 285 ft. long.

Bids are to be submitted in two (2) ways:

First, on the work complete, contractor furnishing all materials.

Second, on labor and equipment, the City to furnish all materials, delivered f.o.b. Marquette, Michigan.

Separate proposals will be received for the power house building, embracing the superstructure above the main floor finished complete.

Proposals will be received for the foundation for the penstocks and separately for foundation of power house carried up to top of main floor ready to receive the brick superstructure and also including excavation for the tail-race.

Plans and specifications by Thomas W. Orbinson, Consulting Engineer, Appleton, Wisconsin, are on file at the office of Charles Retallic, Superintendent of the Department of Light and Power, Marquette, Michigan. Upon request, either or both sets will be mailed to prospective bidders on receipt of $25 for each set, which amount will be refunded on their return in good order.

Proposals for said improvement must be made in separate, sealed envelopes, marked so as to indicate improvement referred to and must be accompanied by a certified check or draft in the sum of $500, payable to the City of Marquette, as a guarantee that if bid is accepted, contract will be entered into and its performance properly secured.

The Commission reserves the right to accept or reject any or all bids.

Separate proposals will be received from pipe manufacturers for furnishing, erecting and connecting up the woodstave pipe.

CITY OF MARQUETTE,
J. F. ANDERSON,
City Purchasing Agent.

Bids: July 2.

Physical Education Building

AT MARSHALL COLLEGE
HUNTINGTON, W. VA.

Huntington, W. Va.

Sealed bids will be received by the State Board of Control until 3 P.M. of July 2, 1919, at its office in Charleston, W. Va., for doing all work and furnishing all materials necessary to complete the building described below according to the plans and specifications of H. Rus Warne, architect, Charleston, W. Va.

One two story and basement building, 156 ft. x 68 ft. 2 in. Exterior press brick, trimming terra cotta. Composition roof. Interior mill construction. Wood truss, reinforced concrete and steel construction.

Basement contains two swimming pools enamel brick; lockers, showers, toilets, heater and filter room; high pressure boiler house heater and filters. Wood stairways.

First floor contains gymnasium, reception room, director's room and entrance hall. Wrought iron stairways.

Second floor contains upper part of gymnasium, running track and physical science room.

General contractors can secure plans and specifications by addressing the office of the State Board of Control, Charleston, W. Va., accompanying their request with check of $10, same to be refunded only when bid is received accompanied by Proposal Bond as required in the specifications, otherwise check to be retained.

Sub-contractors can secure plans and specifications by deposit of two five dollar checks, one of which will be refunded on return of plans and specifications.

STATE BOARD OF CONTROL.
J. S. LAKIN, Member,
Charleston, W. Va.

Bids: June 17.

School Construction

THE BOARD OF EDUCATION OF NEWARK
IN THE COUNTY OF ESSEX

Sealed proposals will be received at the office of the Board between 4 and 4:15 o'clock P.M., Tuesday, June 17, 1919, and then publicly opened and read for the construction and completion of the

SEYMOUR VOCATIONAL SCHOOL,

to be located on Sussex Avenue between First and Second Streets.

Bids will be received for General Construction and Engineering Equipment; one for the general construction work and for one or more of the sub-divisions of the engineering equipment, namely, for heating, ventilating and power, engines and generators, electric work, plumbing, and vacuum cleaner.

Terms of proposal and surety required are fixed by the specifications. Blank proposals for the general construction work are obtainable at the offices of John H. and Wilson C. Ely, Architects, Room 1210, Firemen's Building, Newark, N. J., where contract and bond forms, drawings and specifications may be examined or procured.

Blank proposals for the engineering equipment work are obtainable at the Board's Engineering Department, fourth floor, City Hall, where contract and bond forms, drawings and specifications may be examined or procuerd.

The Board reserves the right to accept or reject any or all proposals, to waive informalities, and to award contracts for the whole or any part thereof at its discretion.

R. D. ARGUE,
May 23, 1919. Secretary

Bids: June 10.

Sewer Construction

OFFICE OF THE COMMISSIONER OF PUBLIC WORKS.
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals, for

CONSTRUCTING A REINFORCED CONCRETE OR SEGMENT BLOCK SEWER IN

Florence and Salt Streets, on Florence Street from a point 100 ft. E. of center line of Queen Street to Salt Street, and on Salt Street, from Florence Street to Holmes Street, all in accordance with the plans, specifications and detailed information on file in this office and in the office of the City Clerk. Work shall commence not later than July 15, 1919, and be completed not later than December 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in a sum of not less than twenty-five (25) per cent. of the amount of the contract, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

ROBERT F. JOHNSON,
Com. of Light, Water and Sewers.

OFFICIAL PROPOSALS

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD DISTRICT NO. 2

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 4 P.M., June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 52.00 miles of limestone macadam and 2 miles of bituminous macadam road, through the towns of Winslow, Fayetteville, and Goshen, Arkansas. Separate bids will be received on the steel bridges and the culvert tile. The item, hauling and placing tile will be included in the general bids, however. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Secretary.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Secretary, J. W. Reynolds, Fayetteville, Arkansas, and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District, in the sum of 5% of the amount of the bid. A construction bond of 25% of the contract will be required of the successful bidders. The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 2.

C. W. APPLEBY, President.
W. J. REYNOLDS, Secretary.
J. V. WALKER, Attorney
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: June 10.

Road Reconstruction

Wilmington, Del.

Proposals, addressed to the President of the Levy Court, Room 133, County Building, Wilmington, Delaware, will be received until 12 o'clock noon, Tuesday, June 10, 1919, for the reconstruction with a bituminous top surface (penetration or mixed method) of the following roads: Silverside Road, Brandywine Hundred, 2.87 miles. Glasgow-Cooch Road, Pencader Hundred, 2.7 miles. Hillside Mills, Christiana Hundred, 4.0 miles. Hockessin-Yorklyn, Mill Creek Hundred, 2.10 miles. Adam's Dam-State Line, Christiana Hundred, 2.74 miles. Greenbank-Price's Corner, Christiana Hundred, 0.51 miles. Specifications may be secured at the office of the County Engineer, Room 133, County Building, on and after May 29, 1919, upon making a deposit of $5, which will be refunded upon their return on or before June 15, 1919.

A certified check or bond for $500 for each road must accompany every bid. The Levy Court reserves the right to reject any or all bids.

CHARLES E. GRUBB,
County Engineer.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M., June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

OFFICIAL PROPOSALS

Bids: June 17.

Paving

Henderson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Hnderson, N. C., at City Hall, in Henderson, N. C., until 4 P.M., June 17, 1919, for Street Improvements.

The work will consist of about:

55,000 sq.yd. of asphalt, bitulithic, concrete, brick or other pavement.
7,000 lin.ft. of granite or concrete curb.
7,000 lin.ft. of concrete gutter.
9,000 sq.yd. of sidewalk.
18,000 cu.yd. of grading.

And the necessary drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Street Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $5000 as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Henderson and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

M. H. STONE, Mayor.

GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD DISTRICT NO. 1.

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Washington County Judge, B. F. Campbell, Fayetteville, Arkansas, until 2 P.M. June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 22.27 miles of limestone or gravel macadam road, between Springdale and the Madison County Line. The Commissioners reserve the right to accept either or both types of road. They also reserve the right to furnish the culvert tile, and the contractor is asked to bid both ways; furnishing hauling and placing, and just hauling and placing tile. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Attorney of the District.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Board of Commissioners, Springdale, Ark., and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District in the sum of 5% of the amount of the bid, and a construction bond of 25% of the contract will be required of the successfu lbidders.

The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 1.

W. B. BROGDEN, President.
L. D. PETROSS, Secretary.
J. W. GRABIEL, Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

OFFICIAL PROPOSALS

Bids: June 11.

Paving

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 11, 1919, for the construction of pavements on North Fourth Avenue, between Ann and Kingsley Streets; Catherine Street, between Main Street and Fifth Avenue, and Detroit Street, between Ann and Catherine Streets; Broadway, from Michigan Central Railroad bridge to the north line of Swift Street; Detroit Street, from Catherine Street to Michigan Central bridge; South University Avenue, between State and Oxford Road; East University Avenue, between North University Avenue and Hill Street, and on Thayer Street, between North University Avenue and Huron Street; according to plans and specifications in City Engineer's office.

The approximate quantities are as follows: 38,000 sq.yd. pavement; 38,000 sq.yd. concrete foundation; 20,000 lin.ft. curb; 10,000 cu.yd. excavation, and 500 lin.ft. stone header. Alternate bids will be received on brick, asphaltic concrete and concrete pavements.

A certified check for $1000 must accompany all bids for the construction of pavements, as a guarantee of the good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

Bids: June 17.

Drainage Ditches

BURLINGTON, DES MOINES COUNTY, IOWA.

Burlington, Iowa.

Sealed proposals will be received at the office of the County Auditor at Burlington, Iowa, until one-thirty P.M., on the 17th day of June, A. D. 1919, for the construction of drainage channels and such other work, all of which are particularly described in the plans and specifications for the work, which consists of the excavation of 125,077 cu.yd. of ditch work and the laying of 1240 lin.ft. of 12 in. tile and the construction of one concrete bulk head.

The above work consists of one ditch 7000 ft. long with 12 to 20 ft. bottom and one ditch 8000 ft. long with 10 ft. bottom, all the other ditches 6 ft. bottom.

The work will have to be done with a drag line or caterpillar machine.

Monthly estimates will be given and paid as the work progresses.

The work shall begin on or before July 10, 1919, and completed on or before March 1, 1920. A deposit of 10 percentum of the proposal will be required.

The Board of Supervisors reserve the right to reject any and all bids and readvertise the work.

Proposal blanks and detailed information concerning the proposed work can be had at the County Auditor's office in Burlington, Iowa, or from the office of M. E. Bannon at Fort Madison, Iowa, who is the engineer for the work.

(Signed) J. F. WEBER.
County Auditor.

OFFICIAL PROPOSALS

Bids: June 10.

Highway Construction

Schoharie Co., N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Tuesday, June 10, 1919, for Contract 202, for the construction of about 7¾ miles of highways, including clearing, grading, draining, building of culverts and guard-rails, around the Schoharie reservoir, in the Towns of Gilboa and Conesville, Schoharie county, Prattsville, Greene county, and Roxbury, Delaware county, New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the secretary, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Comimssioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: June 4.

Storm Sewers

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 4, 1919, for the construction of storm water sewers on Detroit Street, from Kingsley Street to Fifth Avenue; on Catherine Street, from Main Street to Fifth Avenue; on South University Avenue, from Llinden Street to Oxford Road; on East University Avenue, from South University Avenue to North University Avenue, from Linden Street to the Huron River southwesterly about 300 ft.; according to plans and specifications in the City Engineer's office.

Approximate quantities are as follows: 1200 lin.ft. of 15 in. vitrified sewer pipe; 3500 lin.ft. of 12 in. vitrified sewer pipe; 47 inlets; 18 manholes; 1800 cu.yd. excavation.

A certified check for $500 must accompany all bids for the construction of storm water sewers, as a guarantee of good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By the Order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

Curb, Gutter, Etc.

Strong City, Kan.

City Council of Strong City, Kansas, asks for bids on

8566 lineal feet curb and gutter, 782 lineal feet to be repaired and raised, and

21,296.49 square yards bituminous Macadam Street.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

OFFICIAL PROPOSALS

Bids: June 5.

Brick Paving

Fort Edward, N. Y.

Sealed proposals, addressed to the Clerk of the Village of Fort Edward, N. Y., and endorsed "Proposals for building sections of Brick Paving in the Village of Fort Edward, N. Y.," will be received by the Board of Trustees of said Village at their office until June 5th, 1919, at 2 o'clock P.M. and at that time and place will be publicly opened and read.

DESCRIPTION

Paving with brick McCrea St. from the westerly end thereof to West Broadway and Lower Broadway from the Aqueduct to the point where the tracks of the Hudson Valley Railway leaves the same; together with the necessary grading, curbing and guttering of said streets.

All bids must be made on the regular forms funrished by the Village and all prices must be plainly stated in ink both in words and figures.

Plans and specifications are on file in the office of the Board of Trustees and the office of R. G. Gibson, Engineer, and may be obtained for the price of five dollars ($5), said price to be refunded on the return of the plans and specifications in good condition.

No bid shall be allowed to be withdrawn for any reason whatsoever after it has been presented to the Village Clerk.

Bidders are required to state in their bids their names and places of residence and the names of all persons interested with them in said bids.

A certified check in an amount equal to at least five per cent. (5%) of the bid, payable to the Treasurer of the Village of Fort Edward, N. Y., must accompany each bid. All these checks except that of the bidder whose bid is accepted will be returned to the persons making them within three (3) days after the execution of the contract. If the bidder whose bid shall have been accepted, shall refuse or neglect to execute the contract within ten (10) days after the notice that the contract has been awarded to him or them, the amount of the deposit made by him or them will be forfeited to and retained by the Village of Fort Edward as liquidated damages for such neglect or refusal. But if he or they shall execute the contract in the time aforesaid, said deposit shall be returned to him or them.

A bond, with some reliable Surety Company, equal in amount to fifty per cent (50%) of the price bid will be required of the successful bidder for the faithful performance of the contract.

The contract will be awarded to the bidder whose prices, reputation, experience and standing in the contracting business are regarded as most advantageous for and to the best interest of the Village, and whose plant and equipment and financial ability are regarded as adequate to promptly and efficiently perform the work. The Board of Trustees reserves the right to reject any or all bids and to award the whole or any part of the work.

WILLARD ROBINSON,
President.

FRED J. BETTS,
Clerk.

OFFICIAL PROPOSALS

Bids: June 14.

Sewers, Sewage Sedimentation Tank and Screen Chamber

Port Jefferson, New York.

Sealed proposals for furnishing all labor and materials required for constructing Sewers, Sewage Sedimentation Tank and Screen Chamber, for the Port Jefferson Sewer District, Town of Brookhaven, Suffolk County, New York, addressed to the Sewer Commissioners of the Sewer District, Port Jefferson, New York, and endorsed "Proposal for Constructing Sewers, Sedimentation Tank and Screen Chamber," will be received by the Sewer Commissioners at the office of Thos. O'Donnell, Room 8, Post Office Bldg., Port Jefferson, New York, until two o'clock P.M., on June 14th, 1919.

Proposals must be made on the blank form of proposal prepared by the Sewer Commissioners. Plans and specifications may be obtained from A. J. Provost, Jr., Consulting Engineer, 39 West 38th Street, New York City, or from Thos. O'Donnel, Port Jefferson, N. Y., upon depositing $10, which will be refunded if said plans and specifications are returned in good condition within thirty days after bids have been received and acted upon by the said Sewer Commissioners.

Proposals must be accompanied by cash or a certified check on a solvent Bank or Trust Company, drawn to the order of Thomas O'Donnell, Chairman, for One Thousand Dollars ($1000.00) and a bond in the sum of Three Thousand Dollars ($3000.00) for the proper execution of the contract.

The bidder to whom the contract is awarded will be required to execute the same and to furnish a surety bond in the sum of Fifteen Thousand Dollars ($15,000).

The Sewer Commissioners reserve the right to reject any and all bids.

C. W. DARE, Secretary.

Bids: June 18.

Water Filtration Plant

Beggs, Oklahoma.

Bids will be received by the Board of Trustees of the Town of Beggs, Oklahoma, for one mechanical filter plant, capacity 500,000 gallons per 24 hours, to be erected at the waterworks plant of the town of Beggs; also for one 7 x 8 truplex pump and 25 H.P. electric motor.

Bids to be in the hands of the Town Clerk of the Town of Beggs on or before 11.30 A.M., June 18th, 1919.

Plans and specifications are on file with the Town Clerk and may be seen upon application to him.

All bids must be accompanied by a certified check for $500.00 made payable to the Town Treasurer of the Town of Beggs without condition as a guarantee that bidders will sign contract and make bond for the consetruction of the work provided their proposition is accepted. The right is reserved to reject any or all bids.

W. K. ENOCH.
Town Clerk.

SEALED PROPOSALS will be opened by the Supt. of Lighthouses, Baltimore, Md., 2 o'clock P.M., June 12, 1919, for furnishing and placing rip rap stone at Craney Island Light Station, Va. Information upon application to the above Supt.

OFFICIAL PROPOSALS

Bids: June 12.

Brick Pavement

Olean, N. Y.

Notice is hereby given that sealed proposals will be received by the Commissioners of Public Works of the City of Olean, N. Y., at the office of the Superintendent of Streets in the City Building until 8 o'clock P.M., on the 12th day of June, 1919, for the construction of Brick Pavement upon concrete foundation with necessary sanitary and storm sewers and appurtenances in the following streets:

GROUP ONE

Fulton Street, from East State Street to P. R. R. switch.

South Clinton Street, from East State Street to East Green Street.

East Henley Street, from South Barry Street to Fulton Street.

East Green Street, from South Barry Street to South Clinton treet.

Approximate amount of pavement, 7700 square yards.

GROUP TWO

North Eighth Street, from Buffalo Street to Lincoln Street.

North Ninth Street, from Buffalo Street to Wayne Street.

North Sixth Street, from Washington Street to Sullivan Street.

Buffalo Street, from Washington Street. to Reed Street.

Winters Avenue, from Washington Street to Sullivan Street.

Approximate amount of pavement 15,790 square yards.

GROUP THREE

Eleventh Street, from Irving Street to Reed Street.

North Twelfth Street, from West State Street to viaduct.

South Twelfth Street, from West Henley Street to West State Street.

Approximate amount of pavement 15,970 square yards.

Fifth Street, from Irving Street to Putnam Street.

Approximate amount of pavement 3640 square yards.

Plans and specifications may be seen and bid sheets procured at the office of the Superintendent of Streets, City Building, Olean, N. Y.

The right is reserved to reject any or all bids.

S. M. GAYLOR,
Permanent Commissioner of Public Works.
E. E. ALLEN,
Superintendent of Streets.
Dated: May 22, 1919.

Bids: June 9.

Concrete Bridge Construction

Montgomery, Ala.

Sealed bids will be received by the Board of Revenue of Montgomery County, Alabama, until noon, Monday, June 9, 1919, and at that time publicly opened for the construction of a reinforced concrete bridge, one thousand two hundred and eighty-eight feet long, with an eighteen foot roadway, over Catoma Creek on the Norman Bridge Road, five miles south of Montgomery.

A certified check for four hundred dollars will be required to accompany each bid. Plans and specifications are on file in the office of the State Highway Engineer and the County Engineer, Montgomery, Alabama. The right is reserved to reject any or all bids.

W. S. KELLER,
State Highway Engineer,
Montgomery, Alabama.

OFFICIAL PROPOSALS

Bids: July 9.

Classification and Appraisal of Loads

Toole County, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana
H. E. MOODY, Clerk.

Bids: June 3.

Paving

Auburn, N. Y.

Notice is hereby given that it is proposed to pave Grover Street with asphalt, stone filled asphalt, vitrified brick or bitulithic and John Street with asphalt, stone filled apshalt, vitrified brick, bitulithic or concrete.

Plans and specifications for said pavings are on file in the office of the City Engineer where they may be seen and examined, and copies of the plans and specifications and blank proposals for doing the work may be obtained of said City Engineer upon the payment of the sum of $10, said sum to be refunded upon the return of the plans and specifications to the City Engineer.

Sealed proposals to contract for said pavings will be received by the Mayor up to 8o'clock P.M., June 3, 1919, and at the meeting of the Common Council to be held on the evening of that day, said proposals will be opened and considered.

Each sealed proposal shall be accompanied by a certified check in the sum of $500 for Grover Street and $200 for John Street, payable to the order of the City of Auburn, to become and be the property of the city if such proposal be acepted, and the person, persons or corporation making it does not within fifteen days after notice of its acceptance enter into and execute a contract to do such paving in conformity with the specifications and proposals accepted and execute and deliver concurrently therewith a bond in the penal sum of one and one-quarter times the amount for which the person, persons or corporation proposes to do the work with two or more sureties, each surety justifying in the penal sum of said bond to be approved by the Mayor conditioned for the faithful performance of such contract in all its particulars by the contractor.

Instead of such certified check each sealed proposal may be accompanied by a bond in the penal sum equal to ten per cent. of the gross amount of the contract, signed by the person, persons or corporation so proposing and by two or more sureties, each surety justifying in the penal sum of said bond, or a surety company bond in the penal sum of ten per cent. of the gross amount of the contract to be approved by the Mayor, conditioned upon the same requirements as heretofore stated.

By Order of the Common Council.

C. A. DAYTON, City Clerk.
Dated: Auburn, N. Y., May 23, 1919.

OFFICIAL PROPOSALS

Bids: June 12.

Pipe Sewers—Pumping Machinery and Pumping Stations Sewerage System

WESTERLY, RHODE ISLAND

Westerly, R. I.

The Board of Water Commissioners of the Town of Westerly, Rhode Island, will receive sealed proposals for furnishing materials and doing all other work required to complete the construction of about eight (8) miles of pipe sewers from six (6) to twenty-four (24) inches in diameter, with manholes complete; also one (1) main pumping station and one (1) sub-pumping station.

CONTRACT NO. 1

Proposals for Sewer Pipe and Specials will be received until 12 o'clock noon, Tuesday, June 10, 1919.

CONTRACT NO. 2

Proposals for Manhole Frames and Covers will be received until 12 o'clock noon, Tuesday, June 10, 1919.

CONTRACT NO. 3

Proposals for Pumping Machinery will be received until 12 o'clock noon, Thursday, June 19, 1919.

CONTRACT NO. 4

Proposals for Laying the Pipe System will be received until 12 o'clock noon, Thursday, June 12, 1919.

CONTRACT NO. 5

Proposals for Pumping Stations will be received until 12 o'clock noon, Thursday, June 12, 1919.

Plans may be seen and Specifications and Forms of Proposal obtained at the office of the Board of Water Commissioners, Town Hall, Westerly, Rhode Island, or at the office of the Consulting Engineer, Samuel M. Gray, Grosvenor Building, Providence, Rhode Island.

Proposals must be submitted on the form furnished by the Board and a certified check in amount called for on proposal form must accompany each bid.

The Board of Water Commissioners reserve the right to accept or reject any and all proposals and to accept any proposal which they deem to be most favorable to the interests of the town.

LOUIS W. ARNOLD.
Chairman, Board of Water Commissioners.
THOMAS McKENZIE, Engineer.

Bids: June 3.

Sanitary Sewer System and Sewage Disposal Plant

Aurelia, Iowa.

Separate sealed proposals will be received by the Town Clerk of the Town of Aurelia, Iowa, at his office in said Town, until three o'clock P.M., on the 3rd day of June, A. D. 1919, for the construction of a Sanitary Sewer System and Sewage Disposal plant in said town.

Dated this 16th day of May, A. D. 1919, at Aurelia, Iowa.

L. E. CHRISTENSEN,
Town Clerk.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

OFFICIAL PROPOSALS

Bids: June 2

Fireproofing

Trenton, N. J.

Sealed proposals for fireproofing dumbwaiter shafts and stairways, New Jersey State Hospital, Trenton, New Jersey, will be received at the Department of Architecture, 142 West State Street, Trenton, New Jersey, at twelve o'clock on Monday, the second day of June, 1919, at which time they will be publicly opened and read.

Proposals must be sealed and addressed to the State Architect, and marked as above. Each proposal must be acompanied by a certified check drawn to the bidder's order and properly endorsed for an amount equal to at least five per cent. (5%) of the amount of the bid.

The right to reject any or all bids is reserved.

The successful bidder, after contract is awarded, will be required to furnish a satisfactory surety bond in the full amount of the contract price to guarantee the fulfillment of the conditions of his contract.

Plans and specifications may be obtained upon application to the Department of Architecture on deposit of $25.00, this amount to be returned to bidder upon return of plans and specifications in good order.

FRANCIS H. BENT,
State Architect.

Bids: June 3.

Paving and Sewering

Butler, Pa.

Sealed proposals directed to the City Clerk of Butler, Pa., will be received at the City Hall until 3 P.M., Tuesday, June 3, 1919, for the paving and sewering of the following streets:

Oak Street, south property line of Polk to Charles Street, approximately 1152 sq.yd.

Summit Street, Fulton to Polk, approximately 1365 sq.yd.

Jefferson Street, Main to east side of Monroe, approximately 6915 sq.yd.

Wayne Street, Main to Viaduct, approximately 1917 sq.yd.

Center Avenue, bridge to west curb line of Lookout Avenue, approximately 4175 sq.yd.

Jefferson Street, sewer approximately 1840 lin.ft. of main sewer and 1150 lin.ft. of laterals.

Wayne Street, sewer, approximately 550 lin.ft. of main sewer and 324 lin.ft. of laterals.

Specifications, proposal blanks and detailed information can be obtained by applying to the City Engineer.

A deposit of five ($5) dollars is required for each complete set of plans and specifications sent out, which will be refunded upon the return of the plans in good condition.

A certified check in the sum of ten (10%) per cent. of the gross bid must accompany the proposal.

The City reserves the right to reject any and all bids.

H. O. CARSON,
City Engineer.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District Engineer, P. O. Box 1017, Memphis, Tenn.

OFFICIAL PROPOSALS

Bids: June 2, 1919.

Public Water Supply

MUNICIPAL BOARD

Newark, N. Y.

Notice is hereby given that sealed proposals for the construction of water supply improvements for Newark, N. Y., will be received at the office of the Municipal Board of Newark, N. Y., until 10 o'clock A.M., June 2, 1919, and then publicly opened.

Description of work to be done:

To construct an earthen dam and dikes across Case Creek and the adjoining valley at a point about two and one half (2½) miles southeast of Clifton Springs, N. Y. The earthen dam and dikes will contain approximately three thousand (3000) yards of concrete and thirty thousand (30,000) yards of earth embankment, to construct and furnish all the material for a million gallon mechanical filtration plant, to be built of reinforced concrete and brick, to haul and lay about thirty-eight thousand (38,000) feet of fourteen (14) inch cast iron pipe, to furnish about one thousand seven hundred (1700) tons of fourteen (14) inch cast iron pipe. Separate bids will be received on each division of the work.

Detailed plans and specifications of the work may be seen for examination at the office of James P. Wells, Consulting Engineer, Cutler Building, Rochester, N. Y., or at the office of Mr. Staniland Scarth, Municipal Board, Newark, N. Y. Plans and specifications may be obtained for the sum of $10, which will be returned upon the return of the plans and specifications in good condition.

A certified check for five per cent. (5%) of the amount of the bid made, payable to the order of the Municipal Board, must accompany each proposal. The right is reserved by the party of the second part to reject any and all proposals.

Proposals shall be submitted in sealed envelopes furnished for that purpose with the specifications. Only sealed bids will be considered.

All bids received will be retained by the Municipal Board and will not be returned to the contractors.

GEO. A. BURNHAM,
Chairman Municipal Board.

Attest:
FRANK J. BALTZEL,
Clerk Municipal Board.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

OFFICIAL PROPOSALS

Bids: June 17.

Construction, Heating, etc.

Ossining, N. Y.

CONSTRUCTION WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); Clinic Building (No. 8) and Pump House and Reservoir.

HEATING WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

SANITARY WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

ELECTRIC WORK—Mess Hall and Kitchen Building (No. 4); Detention Building (No. 5); Outside Cell Building (No. 7); and Clinic Building (No. 8);

NEW BOILERS—Two new 400 Hp. Water Tube Boilers,

at Sing Sing Prison, Ossining, N. Y., will be received by Hon. Chas. F. Rattigan, Superintendent of State Prisons, Room 618, Hall of Records Building, Centre and Chambers Streets, New York City, until 2:30 o'clock P.M., on Tuesday, June 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3229, 3230, 3231, 3232, 3233, 3220, 3223, 3226, 3252, 3221, 3224, 3227, 3222, 3225 and 3228. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Warden of Sing Sing Prison, Ossining, N. Y.; at Room 618, Hall of Records, New York City, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: May 14, 1919.

OFFICE OF THE QUARTERMASTER, Fort Hancock, N. J.—Sealed proposals in triplicate will be received at this office until 2 P.M., June 7, 1919, and then opened, for surfacing and constructing approximately three and one-half (3½) miles of bitulite macadam or concrete road at this Fort. Plans and specifications furnished at this office, indorse envelopes "Proposals for Roads." MAJOR W. L. CONRAD, Quartermaster.

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

Bids: June 16.

Reinforced Concrete Bridge

Valdosta, Georgia.

Sealed proposals will be received by the Board of Commissioners of Lowndes County, Georgia, at the Court House, Valdosta, Georgia, until 10 A.M., June 16, 1919, for furnishing all material, labor and equipment necessary for the erection of a bridge over the Withlacoochee River, about 5 miles from Valdosta.

The following is a list of the quantities of the work to be done:

40 cu.yd. dry excavation.
155 cu.yd. wet excavation.
1240 lin.ft. wood piles under foundation piers.
880 lin.ft. creosoted piles under foundation piers.
3720 lin.ft. 14 x 14 in. reinforced concrete piles.
812 lin.ft. 10 x 10 in. reinforced concrete piles.
904.37 cu.yd. Class "A" concrete.
463.15 cu.yd. Class "B" concrete.
94,520 lb. reinforcing steel.
3363 sq.ft. hog wire.
6 cast-iron rockers.
12 steel rocker plates.
18 3 x 3 in. metal drains.
120 2 in. tubes, sheet metal.

Plans and specifications are on file at the office of the Board of Comimssioners at Valdosta, Georgia, the State Highway Engineer and the J. B. McCrary Company, the Project Engineers at Atlanta, Georgia. Copies may be obtained from the J. B. McCrary Company, Atlanta, upon receipt of $2.50 to cover the actual cost of reproduction which will be refunded if bona fide bid is made.

Proposals must be submitted on regular forms which will be supplied by the Project Engineers and must be accompanied by a certified check for 5 per cent. of the amount bid.

Payments will be made monthly on basis of 85 per cent. of work done and materials embodied in construction, balance when the work is completed and accepted.

The right is reserved to reject any and all bids and waive all formalities.

BOARD OF COMMISSIONERS OF ROADS
AND REVENUES, LOWNDES
COUNTY, GEORGIA.
(By) B. G. LASTINGER,
Clerk of Commissioners.
THE J. B. McCRARY COMPANY,
Engineers,
Valdosta, Georgia.

Bids: June 5.

Water and Tarvia Bound Macadam Roadway's with Stone Curbs and Brick Gutters

Swarthmore, Pa.

Sealed proposals will be received by the undersigned until 7:30 P.M., Thursday, June 5, 1919, at Council Chamber, Borough Hall, Swarthmore, Pa.

32700 sq.yd. tarvia bound macadam.
2800 lin.ft. curbs and brick gutters.
2100 sq.yd. water bound macadam.
1800 lin.ft. stone curbs and brick gutters.

The Borough Council reserves the right to reject any or all bids. For further information inquire of F. M. VARRELL, Borough Secretary, Borough Hall, Swarthmore, Pa.

Bids June 2 ROAD WORK Osceola, Arkansas

203½ Miles Graded Roads, 1,448,660 Cu. Yds. of Excavation, as described in the following advertisements. For further information address Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 12½ miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of Osceola & Little River Road Improvement District No. 1, Mississippi County, Ark., and publicly opened at Osceola Ark., for the construction of the following approximate quantities:

90,000 cubic yards of earth excavation
7 acres clearing and grubbing
300 feet of 18 inch pipe in place
600 " " 24 " " " "
180 " " 35 " " " "
48 cubic yards concrete in place in headwalls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 75 miles of graded earth roads, will be received at Osceola, Ark., until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Luxora & Little River Road Improvement District No. 2, Mississippi County, Arkansas, for the construction of the following approximate quantities:

650,000 cubic yards of earth excavation
197 acres clearing and grubbing
107 acres of grubbing
3,180 lineal feet pipe in place, 18 inch
1,230 " " 24 inch pipe in place
45 " " 36 " " " "
223 cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any or all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 26 miles of graded earth roads will be received until 2 o'clock P.M. on Monday, June 2, 1919, by the Board of Commissioners of the Burdette Road Improvement District No. 3, Mississippi County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000 cubic yards of earth excavation
45 acres of clearing and grubbing
5 acres of grubbing
20-18 inch pipe in place
30-24 " " " "
5 cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete or corrugated iron. Bids must be accompanied by a certified check or bidder's bond for at least five per cent. of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 25 miles of graded earth roads will be received until 2 o'clock P.M., Monday, June 2, 1919, by the Board of Commissioners of Poinsett County Road Improvement District No. 3, Poinsett County, Arkansas, and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

200,000 cubic yards of earth excavation
20 acres of clearing and grubbing
25 acres of grubbing
5-35 inch pipe in place
10-30 " " " "
15-24 " " " "
32-18 " " " "
95 cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Bids for the construction of 45 miles of graded earth roads, will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Commissioners of the Road Improvement District No. 5, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

140,000 cubic yards of earth excavation
136 acres clearing and grubbing
1,530 lineal feet 18 inch pipe in place
480 " " 24 " " " "
70 cubic yards concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

Sealed proposals for the construction of 20 miles of graded earth roads will be received until 2 o'clock P.M. Monday, June 2, 1919, by the Board of Cimmissioners of Etowah Road Improvement District No. 2, Mississippi County, Ark., and publicly opened at Osceola, Ark., for the construction of the following approximate quantities:

125,000 cubic yards of earth excavation
75 acres of clearing and grubbing
60 acres of grubbing
35-18 inch pipe in place
20-24 " " " "
2-36 " " " "
100 cubic yards of concrete in place in head-walls.

Proposals will be received on the work as a whole or in sections. Bids for pipe should be made on vitrified tile, concrete and corrugated iron. Bids must be accompanied by a certified check or by a bidder's bond for at least five per cent. of the amount of the bid. The Commissioners reserve the right to reject any and all bids.

For further information write Pride & Fairley, Engineers, Osceola, Ark.

OFFICIAL PROPOSALS

Bids: June 3.

Street Improvement

Griffin, Ga.

Proposals will be received by the City Manager and Board of City Commissioners of Griffin, Georgia, until eleven o'clock, A.M. on Tuesday, June 3rd, 1919, for grading, curbing, draining, and paving certain streets with vitrified brick, concrete, bituminous concrete, patented pavement, or other pavement.

The street paving work will include approximately the excavation of 10,300 cubic yards of earth; the setting of 34,500 lineal feet of granite curb, and the construction of 6500 lineal feet of concrete curb; the laying of storm drains and the furnishing and laying of approximately 47,500 square yards of street pavement, with all the necessary work incident thereto, as called for by the plans, profiles and specifications.

Bidders must use the printed forms accompanying the specifications. A certified check payable to the city of Griffin, for five (5) per cent. of the amount of the bid must accompany each proposal as a guarantee that the contract will be entered into if awarded. An acceptable surety bond for one hundred (100) per cent. of the contract cost will be required. A five (5) year maintenance bond for twenty-five (25) per cent. of the contract cost will be required to guarantee the street pavement against defects. Payment will be in cash, or cash and notes, for eighty-five (85) per cent. of completed and accepted work on monthly estimates.

Plans and specifications may be seen at the office of the City Manager in Griffin, Georgia, and copies of specifications may be obtained from Solomon-Norcross Company, Consulting Engineers, 1625 Candler Building, Atlanta, Georgia, and the City Engineer, Griffin, Georgia, by depositing check for ten ($10) dollars, payable to the Consulting Engineers, to be held until their return. Blue prints may be had at the cost of printing.

The City reserves the right to reject any and all bids.

E. P. BRIDGES, City Manager,
Griffin, Georgia.
G. M. HARRINGTON,
City Engineer, Griffin, Georgia.
SOLOMON-NORCROSS COMPANY,
Consulting Engineers, 1625 Candler Bldg.,
Atlanta, Georgia.

Bids: June 5.

Grading

Fayette County, West Virginia.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until June 5th, 1919, for grading one section of County Highway of approximately 3.0 miles, from Fayette to Lansing, containing 45,000 cu. yds. of excavation. About 30 per cent rock. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications, which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check for five per cent. of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with bid. The County Court reserves the right to reject any and all bids.

By order o fthe County Court of Fayette County, West Virginia.

J. K. McGRATH, Road Engineer.
H. O. BOLEY, President.
R. J. STEGALL, Clerk.

OFFICIAL PROPOSALS

Bids: June 9.

Sewage Treatment Works

Pontiac, Michigan.

Sealed proposals will be received at the office of the City Clerk, City Hall, until 1:30 P.M., June 9, 1919, for the construction of the Sewage Treatment Works.

The work contemplated comprises the construction of an outfall sewer, grit chamber, two-story settling tanks, trickling filters, secondary tanks, sludge bed, conduits, bridge, and appurtenances. The following quantities give a general idea of the amount and character of the work to be done:

Outfall sewer	2,052 lin.ft.
Excavation	34,710 cu.yd.
Reinforced concrete	4.078 cu.yd.
Filter stone	15,700 cu.yd.
C. I. piping	35 tons

Plans and Specifications are on file at the office of the City Clerk, City Hall, and copies may be obtained at the office of Clarence W. Hubbel, Consulting Engineer, 2348 Penobscot Bldg., Detroit, Michigan. A deposit of fifteen dollars ($15) will be required for each set of plans and specifications. If a bid is submitted this deposit will be refunded upon the return of said plans and specifications in good order.

All bids must be accompanied by a certified check on a solvent bank for fifteen thousand dollars ($15,000).

Separate proposals will be entertained on the Outfall Sewer. A certified check for one thousand dollars ($1000) will be required where proposals are made on outfall sewer only.

No proposal will be entertained unless made on blanks furnished by the consulting engineer, and delivered to the City Clerk on or before 1:30 P.M., June 9, 1919.

The city reserves the right to reject any or all bids.

By order of the City Commission.

C. W. HAM,
City Clerk.

Bids: June 9.

Water Main and Sewer Construction

WASHINGTON SUBURBAN SANITARY DISTRICT
CONTRACT NO. 1
Washington, D. C.

Sealed proposals will be received at the office of the Washington Suburban Sanitary Commission, 611 F Street, N. W., Washington, D. C., until Monday, June 9, 1919, at 3 P.M., and then and there opened, for water main and sewer construction in the Hyattsville, Maryland Water and Sewer District, approximately as follows:

6500 lin.ft. 6 in. and 8 in. cast-iron water mains.
7200 lin.ft. 6 in., 8 in. and 10 in. vitrified pipe sewers.
16 fire hydrants.
22 manholes.
Water service and sewer house connections.

Bids must be accompanied by certified check in sum equal to 5% of the amount of the bid.

On and after May 26, plans and specifications may be seen at the Washington office of the Commission, and may be obtained at the office of the Chief Engineer of the Commission, Hyattsville, Maryland, for the sum of two dollars, which will not be refunded.

WASHINGTON SUBURBAN SANITARY COMMISSION
(By) WILLIAM T. S. CURTIS,
Chairman.

OFFICIAL PROPOSALS

Bids: June 5

Concrete Bridges

BUREAU OF HIGHWAYS, PHILADELPHIA, PA.

Sealed bids will be received by the Director of the Department of Public Works up to noon Thursday, June 5th, 1919, and then publically read, for one concrete arch bridge, 86 foot span and 78 feet wide and one flat slab construction bridge, 24 Is incased in concrete, 32 feet clear span and 82 feet wide.

Plans, specifications and proposal sheets may be seen at Room 232 City Hall; a deposit of Twenty Dollars will be required of those taking out plans to be refunded upon return.

The attention of bidders is called to the special requirements contained in the proposal sheet.

GEORGE E. DATESMAN,
Director, Department of Public Works.

Bids. June 4.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter; Changing Water Main; and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, June 4, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3243, 3244 and 3245. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission
Dated: May 12, 1919.

Bids: June 10

Pumping Plant

MUSCATINE LOUISA DRAINAGE DISTRICT NO. 13
Wapello, Ia.

Sealed bids will be received until one o'clock P.M., June 10, 1919, by the Muscatine-Louisa Drainage District No. 13, at the office of the County Auditor of Louisa County, Wapello, Iowa, for a steam driven pumping plant containing one 36 in and one 24 in. double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., Peoria, Illinois.

Why?

WHY do Government regulations specify that contracts for construction, equipment and supplies over a certain minimum amount **must** be advertised?

WHY do the laws of most States and Municipalities specify the same thing?

WHY do so many private corporations advertise **their** big contracts?

WHY do Consulting Engineers, Architects, and others recommend and endorse the advertising of Contracts To Be Let?

And—

WHY are 90% of the advertisements on which **real national competition** is desired published in ENGINEERING NEWS-RECORD?

In the answers to the foregoing questions you will find unquestionable proof that

1—**Advertised Contracts** are the accepted form of public letting to insure the awarding of contracts free of prejudice.

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3—ENGINEERING NEWS-RECORD is universally recognized as the **one** dominant medium of **national** circulation for advertising Contracts To Be Let.

Are your contracts advertised?
Are they advertised in Engineering News-Record?
If not—WHY?

0083

OFFICIAL PROPOSALS

Bids: June 10.

Road Roller

OFFICE OF THE COMMISSIONER OF
PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals for

1. An approximately 10-ton road roller. Complete specifications to be furnished by the bidder.

2. Road. roller bid upon in accordance with detailed information on file in the office of the Commissioner of Public Works.

Delivery shall be made not later than July 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in the sum of $1000, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

GEORGE HOLCOMB,
Commissioner of Public Works.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 21, 1919.—Sealed proposals will be opened in this office at 3 p.m., June 18, 1919, for furnishing the labor required in the construction complete, with materials that will be furnished by the Government, of the United States Post Office Building at Clinton, S. C. Drawings and specifications may be obtained from the custodian of the site at Clinton, S. C., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information on application.

SUB-GRADING
CONTRACTS DESIRED

Our equipment consists of the following: 3—No. 3 Keystone Excavators; 1—No. 6 Keystone Excavator, Koppel Cars, Track, Plymouth Locomotive, and team outfit.

DANIEL J. LYNCH CO., Inc.
201-2 Colonial Trust Bldg., Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: June 3.

Bituminous Material

Manchester, N. H.

Sealed proposals for furnishing and delivering Bituminous Material to the Department of Public Works of Manchester, N. H., will be received at the office of the Department until 2.00 o'clock P.M., June 3, 1919, at which time all proposals will be opened and read and no proposal will be received after that time.

Proposals must be enclosed in an envelope, sealed, addressed to the Department of Public Works, Manchester, N. H., and marked "Proposal, Bituminous Material."

Information as to specifications and requirements may be had upon application at this office.

Each bidder must enclose a certified check or deposit for One Hundred ($100.00) Dollars with is proposal, said check or deposit to be returned unless the party to whom the contract is awarded refuses to sign said contract upon notification of award, in such case the check or deposit shall be forfeited to the City of Manchester.

The Department of Public Works hereby reserve the right to reject any, any part of any or all proposals should they deem it to be for the best interest of the City of Manchester.

DEPARTMENT OF PUBLIC WORKS
SAMUEL J. LORD,
Director.

Manchester, N. H., May 26th, 1919.

In Replying to "Blind" Ads

be careful to put on envelope the key number in the ad. and also local address of office to which reply is sent.

10th Ave. at 36th St., New York.
935 Real Estate Trust Bldg., Phila.
657 Leader-News Bldg., Cleveland.
1570 Old Colony Bldg., Chicago.
501 Rialto Bldg., San Francisco.

Important

Original letters of recommendation or other papers of value should not be enclosed to unknown correspondents—send copies.

POSITIONS VACANT

FIRST-CLASS, high-grade structural steel designer wanted of not less than ten years' experience, and preferably one familiar with blast furnace or steel plant work. Permanent position. State full details regarding experience, salary wanted and date available. P-575, Eng. News-Record, Leader-News Bldg., Cleveland.

A REINFORCED concrete draftsman wanted with company selling reinforcing bars, Minneapolis. P-576, Eng. News-Record, Chicago.

POSITIONS VACANT

AN industrial firm in western Massachusetts wants competent structural steel draftsmen; men familiar with mill building design preferred. State age, nationality, education, experience, and salary expected. P-525, Eng. News-Record.

A YOUNG man for highway work; one having experience preferred; should be a fair draftsman. At once. P-508, Eng. News-Record, Chicago.

CENTRAL West university would consider applicants for vacancy in faculty of civil engineering department. Position open this fall. Salary about $1800 per annum. Prospects for advancement. Applicants must hold degree from a reputable college and have general practical experience in engineering work. P-571, Eng. News-Record, Chicago.

CIVIL engineers wanted for highway work, to make surveys, prepare plans and supervise construction. Salary $100 to $140 per month and expenses when in field. State age, education, experience, physical condition, salary expected and when able to report. Must be U. S. citizen. G. F. Burch, Assistant Highway Engineer, Division of Highways, Springfield, Illinois.

DRAFTSMAN wanted, technical graduate, experienced detail and design railroad bridge superstructures and masonry. State in full education, experience, when will report. Salary, $195. Address P-594, Eng. News-Record, Leader-News Bldg., Cleveland.

DRAFTSMAN wanted, competent to originate designs for old-established company in the vicinity of New York, about to begin the manufacture of rolling steel shutters. State experience, salary and when free. Permanent position to right man. P-568, Eng. News-Record.

DRAFTSMEN—Structural and reinforcing steel detailers wanted. To be considered applications must state age, nationality, education, past experience and salary desired; also how soon you can report. Vanderstucken Engineering Co., Reading, Pa.

DRAFTSMEN wanted—Designing draftsmen on fortification construction; positions permanent; knowledge of reinforced concrete and steel framing necessary; knowledge of electrical installation desirable. Salary, $100 per month and upward, in accordance with qualifications. State experience, qualifications, age and salary desired. Address District Engineer, Room 305 Southern Bldg., Washington, D. C.

ENGINEERS wanted; one transitman and one draftsman, with some experience in highway work. Permanent employment if services satisfactory. P-216, Eng. News-Record, Chicago.

ESTIMATOR wanted for structural steel and ornamental iron work. Give experience, salary expected and how soon could report. Apply Richmond Structural Steel Company, Richmond, Va.

EXPERIENCED estimator wanted on tank and general steel plate work. Give full details in first letter as to age, education, experience, references, salary expected, and earliest date available. P-608, Eng. News-Record, Philadelphia.

EXPERIENCED designer and estimator wanted of all classes of railway freight cars. Give full details in first letter as to age, education, references, salary expected, and earliest date available. P-603, Eng. News-Record, Philadelphia.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

CONTRACTORS
I am at your service

Let me handle your Contract Bonds and Insurance. My service will enable you to secure larger bonds—secure them promptly—no delay.

Swart Service Really Serves

There is no extra charge

HARMON V. SWART
19 Liberty Street, New York

OFFICIAL PROPOSALS

Bids: June 12.

Brick Pavement

Olean, N. Y.

Notice is hereby given that sealed proposals will be received by the Commissioners of Public Works of the City of Olean, N. Y., at the office of the Superintendent of Streets in the City Building until 8 o'clock P.M., on the 12th day of June, 1919, for the construction of Brick Pavement upon concrete foundation with necessary sanitary and storm sewers and appurtenances in the following streets:

GROUP ONE

Fulton Street, from East State Street to P. R. R. switch.

South Clinton Street, from East State Street to East Green Street.

East Henley Street, from South Barry Street to Fulton Street.

East Green Street, from South Barry Street to South Clinton treet.

Approximate amount of pavement, 7700 square yards.

GROUP TWO

North Eighth Street, from Buffalo Street to Lincoln Street.

North Ninth Street, from Buffalo Street to Wayne Street.

North Sixth Street, from Washington Street to Sullivan Street.

Buffalo Street, from Washington Street to Reed Street.

Winters Avenue, from Washington Street to Sullivan Street.

Approximate amount of pavement 15,790 square yards.

GROUP THREE

Eleventh Street, from Irving Street to Reed Street.

North Twelfth Street, from West State Street to viaduct.

South Twelfth Street, from West Henley Street to West State Street.

Approximate amount of pavement 15,970 square yards.

Fifth Street, from Irving Street to Putnam Street.

Approximate amount of pavement 3640 square yards.

Plans and specifications may be seen and bid sheets procured at the office of the Superintendent of Streets, City Building, Olean, N. Y.

The right is reserved to reject any or all bids.

S. M. GAYLOR,
Permanent Commissioner of Public Works.
E. E. ALLEN,
Superintendent of Streets.

Dated: May 22, 1919.

Bids: June 16.

Sewer and Funding Bonds

Maryville, Tenn.

City of Maryville, Tennessee, offers for sale to the highest bidder the following bonds:

$50,000 30-year Sewer Bonds.
$50,000 30-year Funding Bonds.

Said bonds to bear interest at the rate of 5½%, payable semi-annually.

Bids will be opened at 2 o'clock P.M., June 16, 1919.

Certified check for $3000 a guarantee of the good faith of the bidder must accompany each bid.

Address all bids to D. F. Young, Mayor, Maryville, Tennessee.

OFFICIAL PROPOSALS

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

Bids: June 17.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 17, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of the following pavements: 890 lin.ft. of Reinforced Concrete, also 23,075 ft. of Resurfacing with Bituminous Surface Course, in Blair County; 6640 ft. of Plain Concrete in Bradford County; 32,185 ft. of Reinforced Concrete and Hillside Vitrified Brick in Cambria County; 27,940 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 2932 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Chester County; 9067 ft. of Reinforced Concrete in Crawford County; 24,275 ft. of Reinforced Concrete and Hillside Vitrified brick in Cumberland County; 4854 ft. of Bituminous Surface Course on a Concrete Foundation and Vitrified Brick, also 20,200 ft. of Reinforced Concrete, also 9154 ft. of Reinforced Concrete and Hillside Vitrified Brick, and 27,409 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick, or Reinforced Concrete and Hillside Vitrified Brick in Erie County; 37,684 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lancaster County; 39,319 ft. of Reinforced Concrete in Lycoming County; 3678 ft. of either bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Mercer County; 26,400 ft. of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Potter County; 6544 ft. of Reinforced Concrete in Warren County and 40,712 ft. of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding Blanks and Specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg, Pa. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: June 16.

Reinforced Concrete Bridge

Valdosta, Georgia.

Sealed proposals will be received by the Board of Commissioners of Lowndes County, Georgia, at the Court House, Valdosta, Georgia, until 10 A.M., June 16, 1919, for furnishing all material, labor and equipment necessary for the erection of a bridge over the Withlacoochee River, about 5 miles from Valdosta.

The following is a list of the quantities of the work to be done:

40	cu.yd. dry excavation.
155	cu.yd. wet excavation.
1240	lin.ft. wood piles under foundation piers.
880	lin.ft. creosoted piles under foundation piers.
3720	lin.ft. 14 x 14 in. reinforced concrete piles.
812	lin.ft. 10 x 10 in. reinforced concrete piles.
904.37	cu.yd. Class "A" concrete.
463.15	cu.yd. Class "B" concrete.
94,520	lb. reinforcing steel.
3363	sq.ft. hog wire.
6	cast-iron rockers.
12	steel rocker plates.
18	3 x 3 in. metal drains.
120	2 in. tubes, sheet metal.

Plans and specifications are on file at the office of the Board of Comimssioners at Valdosta, Georgia, the State Highway Engineer and the J. B. McCrary Company, the Project Engineers at Atlanta, Georgia. Copies may be obtained from the J. B. McCrary Company, Atlanta, upon receipt of $2.50 to cover the actual cost of reproduction which will be refunded if bona fide bid is made.

Proposals must be submitted on regular forms which will be supplied by the Project Engineers and must be accompanied by a certified check for 5 per cent. of the amount bid.

Payments will be made monthly on basis of 85 per cent. of work done and materials embodied in construction, balance when the work is completed and accepted.

The right is reserved to reject any and all bids and waive all formalities.

BOARD OF COMMISSIONERS OF ROADS
AND REVENUES, LOWNDES
COUNTY, GEORGIA.
(By) B. G. LASTINGER,
Clerk of Commissioners.
THE J. B. McCRARY COMPANY,
Engineers,
Valdosta, Georgia.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

Bids: June 14.

Sewers, Sewage Sedimentation Tank and Screen Chamber

Port Jefferson, New York.

Sealed proposals for furnishing all labor and materials required for constructing Sewers, Sewage Sedimentation Tank and Screen Chamber, for the Port Jefferson Sewer District, Town of Brookhaven, Suffolk County, New York, addressed to the Sewer Commissioners of the Sewer District, Port Jefferson, New York, and endorsed "Proposal for Constructing Sewers, Sedimentation Tank and Screen Chamber," will be received by the Sewer Commissioners at the office of Thos. O'Donnell, Room 8, Post Office Bldg., Port Jefferson, New York, until two o'clock P.M., on June 14th, 1919.

Proposals must be made on the blank form of proposal prepared by the Sewer Commissioners. Plans and specifications may be obtained from A. J. Provost, Jr., Consulting Engineer, 39 West 38th Street, New York City, or from Thos. O'Donnel, Port Jefferson, N. Y., upon depositing $10, which will be refunded if said plans and specifications are returned in good condition within thirty days after bids have been received and acted upon by the said Sewer Commissioners.

Proposals must be accompanied by cash or a certified check on a solvent Bank or Trust Company, drawn to the order of Thomas O'Donnell, Chairman, for One Thousand Dollars ($1000.00) and a bond in the sum of Three Thousand Dollars ($3000.00) for the proper execution of the contract.

The bidder to whom the contract is awarded will be required to execute the same and to furnish a surety bond in the sum of Fifteen Thousand Dollars ($15,000).

The Sewer Commissioners reserve the right to reject any and all bids.

C. W. DARE, Secretary.

Bids: June 17.

Paving

Henderson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Hnderson, N. C., at City Hall, in Henderson, N. C., until 4 P.M., June 17, 1919, for Street Improvements.

The work will consist of about:

55,000	sq.yd. of asphalt, bitulithic, concrete, brick or other pavement.
7,000	lin.ft. of granite or concrete curb.
7,000	lin.ft. of concrete gutter.
9,000	sq.yd. of sidewalk.
18,000	cu.yd. of grading.

And the necessary drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Street Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $5000 as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Henderson and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

M. H. STONE, Mayor.

GILBERT C. WHITE, Engineer,
Durham, N. C.

Bids: June 18.

Water Filtration Plant

Beggs, Oklahoma.

Bids will be received by the Board of Trustees of the Town of Beggs, Oklahoma, for one mechanical filter plant, capacity 500,000 gallons per 24 hours, to be erected at the waterworks plant of the town of Beggs; also for one 7 x 8 truplex pump and 25 H.P. electric motor.

Bids to be in the hands of the Town Clerk of the Town of Beggs on or before 11.30 A.M., June 18th, 1919.

Plans and specifications are on file with the Town Clerk and may be seen upon application to him.

All bids must be accompanied by a certified check for $500.00 made payable to the Town Treasurer of the Town of Beggs without condition as a guarantee that bidders will sign contract and make bond for the consetruction of the work provided their proposition is accepted. The right is reserved to reject any or all bids.

W. K. ENOCH,
Town Clerk.

Bids: July 2.

Physical Education Building

AT MARSHALL COLLEGE
HUNTINGTON, W. VA.

Huntington, W. Va.

Sealed bids will be received by the State Board of Control until 3 P.M. of July 2, 1919, at its office in Charleston, W. Va., for doing all work and furnishing all materials necessary to complete the building described below according to the plans and specifications of H. Rus Warne, architect, Charleston, W. Va.

One two story and basement building, 156 ft. x 68 ft. 2 in. Exterior press brick, trimming terra cotta. Composition roof. Interior mill construction. Wood truss, reinforced concrete and steel construction.

Basement contains two swimming pools enamel brick; lockers, showers, toilets, heater and filter room; high pressure boiler house heater and filters. Wood stairways.

First floor contains gymnasium, reception room, director's room and entrance hall. Wrought iron stairways.

Second floor contains upper part of gymnasium, running track and physical science room.

General contractors can secure plans and specifications by addressing the office of the State Board of Control, Charleston, W. Va., accompanying their request with check of $10, same to be refunded only when bid is received accompanied by Proposal Bond as required in the specifications, otherwise check to be retained.

Sub-contractors can secure plans and specifications by deposit of two five dollar checks, one of which will be refunded on return of plans and specifications.

STATE BOARD OF CONTROL.
J. S. LAKIN, Member.
Charleston, W. Va.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information or application.

Bids: June 11.

Paving

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 11, 1919, for the construction of pavements on North Fourth Avenue, between Ann and Kingsley Streets; Catherine Street, between Main Street and Fifth Avenue, and Detroit Street, between Ann and Catherine Streets; Broadway, from Michigan Central Railroad bridge to the north line of Swift Street; Detroit Street, from Catherine Street to Michigan Central bridge; South University Avenue, between State and Oxford Road; East University Avenue, between North University Avenue and Hill Street, and on Thayer Street, between North University Avenue and Huron Street; according to plans and specifications in City Engineer's office.

The approximate quantities are as follows: 38,000 sq.yd. pavement; 38,000 sq.yd. concrete foundation; 20,000 lin.ft. curb; 10,000 cu.yd. excavation, and 500 lin.ft. stone header. Alternate bids will be received on brick, asphaltic concrete and concrete pavements.

A certified check for $1000 must accompany all bids for the construction of pavements, as a guarantee of the good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD
DISTRICT NO. 1.

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Washington County Judge, B. F. Campbell, Fayetteville, Arkansas, until 2 P.M. June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 22.27 miles of limestone or gravel macadam road, between Springdale and the Madison County Line. The Commissioners reserve the right to accept either or both types of road. They also reserve the right to furnish the culvert tile, and the contractor is asked to bid both ways; furnishing hauling and placing, and just hauling and placing tile. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Attorney of the District.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Board of Commissioners, Springdale, Ark., and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District in the sum of 5% of the amount of the bid, and a construction bond of 25% of the contract will be required of the successfu lbidders.

The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 1.

W. B. BROGDEN, President.
L. D. PETROSS, Secretary.
J. W. GRABIEL, Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: June 17.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS, ALBANY, N. Y.

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, June 17, 1919, for the improvement of the following highways:

CHENANGO—Three highways: 4.78, 5.57, 5.87.
ERIE—One highway: 5.78.
ESSEX—Two highways: 8.85, 1.09.
FULTON—Three highways: 2.80, 4.90, 1.06.
ONONDAGA—Two highways: 7.45, 3.75.
RENSSELAER—Two highways: 1.44, 4.95.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

BROOME—One highway: 4.70.
CATTARAUGUS—One highway: 2.17.
NASSAU—One highway: 1.57.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

FULTON—One contract, reconstruction.
HERKIMER—One contract, resurfacing.
MONROE—Two contracts, resurfacing.
MONTGOMERY—One contract, reconstruction.
ONEIDA—One contract, timber crib-stone fill.
WESTCHESTER — One contract, reconstruction.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FREDERICK STUART GREENE,
Commissioner.
R. K. FULLER, Secretary.

Bids: July 9.

Classification and Appraisal of Lands

Toole County, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana.

H. E. MOODY, Clerk.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

Bids: June 4.

Sanitary Work

Poughkeepsie, N. Y.

Sealed proposals for Sanitary Work—Additions and Alterations to Water Supply System (Additional Filter; Changing Water Main; and Construction of Reservoir), Hudson River State Hospital, Poughkeepsie, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Wednesday, June 4, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3243, 3244 and 3245. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Hudson River State Hospital, Poughkeepsie, N. Y., at the New York Office of the Department of Architecture, Room 1715 Tribune Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: May 12, 1919.

Bids: June 17.

Drainage Ditches

BURLINGTON, DES MOINES COUNTY, IOWA.

Burlington, Iowa.

Sealed proposals will be received at the office of the County Auditor at Burlington, Iowa, until one-thirty P.M., on the 17th day of June, A. D. 1919, for the construction of drainage channels and such other work, all of which are particularly described in the plans and specifications for the work, which consists of the excavation of 125,077 cu.yd. of ditch work and the laying of 1240 lin.ft. of 12 in. tile and the construction of one concrete bulk head.

The above work consists of one ditch 7000 ft, long with 12 to 20 ft. bottom and one ditch 8000 ft. long with 10 ft. bottom, all the other ditches 6 ft. bottom.

The work will have to be done with a drag line or caterpillar machine.

Monthly estimates will be given and paid as the work progresses.

The work shall begin on or before July 10, 1919, and completed on or before March 1, 1920. A deposit of 10 percentum of the proposal will be required.

The Board of Supervisors reserve the right to reject any and all bids and readvertise the work.

Proposal blanks and detailed information concerning the proposed work can be had at the County Auditor's office in Burlington, Iowa, or from the office of M. E. Bannon at Fort Madison, Iowa, who is the engineer for the work.

(Signed) J. F. WEBER,
County Auditor.

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD DISTRICT NO. 2

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 4 P.M., June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 52.00 miles of limestone macadam and 2 miles of bituminous macadam road, through the towns of Winslow, Fayetteville, and Goshen, Arkansas. Separate bids will be received on the steel bridges and the culvert tile. The item, hauling and placing tile will be included in the general bids, however. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Secretary.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Secretary, J. W. Reynolds, Fayetteville, Arkansas, and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District, in the sum of 5% of the amount of the bid. A construction bond of 25% of the contract will be required of the successful bidders. The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 2.

C. W. APPLEBY,
President.
W. J. REYNOLDS,
Secretary.
J. V. WALKER,
Attorney.
Fayetteville, Ark.

HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

Bids: June 4.

Storm Sewers

Ann Arbor, Mich.

Sealed proposals will be received by the Board of Public Works, Ann Arbor, Mich., through the City Clerk, on or before 7 o'clock P.M., Wednesday, June 4, 1919, for the construction of storm water sewers on Detroit Street, from Kingsley Street to Fifth Avenue; on Catherine Street, from Main Street to Fifth Avenue; on South University Avenue, from Llinden Street to Oxford Road; on East University Avenue, from South University Avenue to North University Avenue, from Linden Street to the Huron River southwesterly about 300 ft.; according to plans and specifications in the City Engineer's office.

Approximate quantities are as follows: 1200 lin.ft. of 15 in. vitrified sewer pipe; 3500 lin.ft. of 12 in. vitrified sewer pipe; 47 inlets; 18 manholes; 1800 cu.yd. excavation.

A certified check for $500 must accompany all bids for the construction of storm water sewers, as a guarantee of good faith of the bidder, and the Board of Public Works reserves the right to reject any and all bids.

By the Order of the Board of Public Works.

ISAAC G. REYNOLDS,
City Clerk.

OFFICIAL PROPOSALS

Bids: June 10.

Sewer Construction

OFFICE OF THE COMMISSIONER OF
PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals, for

CONSTRUCTING A REINFORCED CONCRETE OR SEGMENT BLOCK SEWER IN

Florence and Salt Streets, on Florence Street from a point 100 ft. E. of center line of Queen Street to Salt Street, and on Salt Street, from Florence Street to Holmes Street, all in accordance with the plans, specifications and detailed information on file in this office and in the office of the City Clerk. Work shall commence not later than July 15, 1919, and be completed not later than December 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in a sum of not less than twenty-five (25) per cent. of the amount of the contract, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

ROBERT F. JOHNSON,
Com. of Light, Water and Sewers.

Bids: June 14.

Pavement Construction

Willoughby, Ohio.

Sealed bids will be received by C. C. Jenkins, Village Clerk, for the construction of approximately 47,000 sq.yd. brick pavement 6 in. concrete foundation, cement grout filler, 33,000 lin.ft. concrete curbing and gutter, combined 12,000 lin.ft. storm sewers, 6 in. to 18 in. in said village until 12 o'clock noon, June 14, 1919, and publicly opened and read at the Council Chamber in said village.

Plans and specifications may be seen at the office of the Village Clerk, or may be obtained from the Village Engineer upon payment of ten dollars which will be refunded when same are returned in good condition. Certified check $500, payable to Village Treasurer. Council reserves the right to reject any and all bids.

C. C. JENKINS, Village Clerk.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Water-tube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District

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PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M., June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

OFFICIAL PROPOSALS

Bids: June 25.

Sewer Construction

Lima, Ohio.

Sealed proposals for the construction of Collett Street Relief Sewer, Contract No. 1, will be received at the office of the Director of Public Service, City Hall, Lima, Ohio, until 12 o'clock noon, Central Standard Time (1 o'clock of so-called "Daylight Saving" Time), of the 25th day of June, 1919, and at that time and place will be publicly opened and read. The City of Lima reserves 30 days thereafter in which to act on the bids.

Alternate bids will be received for Monolithic Concrete, Segment Block or Reinforced Concrete Pipe as set forth on the blank form of proposal furnished by the City of Lima, Ohio. The total length of the sewers under this contract is about 16,430 ft., consisting of the following sizes: 84 in. circular; 78 in. by 127½ in. semicircular; 78 in. circular; 66 in. circular; 54 in. circular; 48 in. circular and 42 in. circular.

In addition there is an outlet abutment at the Ottawa River, an overflow chamber, together with special junctions at various points along the line of the proposed sewer.

The work to be done under this contract must be completed in accordance with the plans and specifications, not later than 30 months after the date of the award of the contract.

Copies of the plans, form of proposal, contract, bond and specifications may be inspected at any of the following offices:

Director of Public Service, City Hall, Lima, Ohio.

Fuller & McClintock, 170 Broadway, New York City.

Wm. G. Clark, 1047 Spitzer Building, Toledo, Ohio.

Copies of the plans and specifications with forms of proposal, contract and bond may be obtained at the office of the Director of Public Service, City Building, Lima, Ohio. A charge of seven ($7) dollars will be made for each set of plans and specifications. No charge will be made for the proposal bond.

Each proposal must be accompanied by a certified check upon a National Bank or Trust Company doing business in the State of Ohio, U. S. Government bonds or cash in the sum of seventeen thousand ($17,000) dollars, made payable to the City of Lima, Ohio.

The bidder to whom the contract is awarded will be required to furnish a surety company bond in the sum of 50% of his bid.

The City of Lima, Ohio, reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which he deems most favorable to the interest of the City of Lima, Ohio.

A. L. METHEANY,
Director of Public Service.
VAUGHN C. MILLER,
City Engineer.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened, for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: June 17.

Branch Sewer

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
EMERGENCY WORK

Sealed proposals for building Fall Brook Branch Sewer, Section 3, and for building the Milliken Branch Sewer, will be received at the office of the Commissioner of Public Works, City Hall, until Tuesday, June 17, 1919 at 12 o'clock M., when they will be publicly opened and read. The work includes the following approximate quantities:

1900 cu.yd. of earth excavation.
770 cu.yd. of ledge excavation.
340 cu.yd. of concrete masonry in trench
13 manholes.
2680 lin.ft. of 24-in. pipe laying.
580 lin.ft. of 15-in. pipe laying.

Each bid must be accompanied by a certified check for $1000. Said check must be made payable to the order of the Treasurer of the City of Portland, Maine, and must not be enclosed with the proposal. A bond of some responsible surety company satisfactory to the Commissioner of Public Works, will be required from the successful bidder to ensure the faithful performance of the conditions of the contract. Blanks on which proposals must be made, specifications and further information may be obtained at the office of the said Commissioner. Bids should be marked, "Proposal for Building Fall Brook Branch Sewer, Section 3, and Milliken Branch Sewer," and addressed to Edward M. Hunt, Commissioner of Public Works, who reserves the right to reject any or all bids, should he deem it for the interest of the City so to do.

Bids: July 5.

Paving

Brunswick, Ga.

Proposals will be received by the Mayor and Aldermen of the City of Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for paving certain streets in the City of Brunswick, Ga., approximating one hundred and five thousand (105,000) square yards.

Specifications can be had free; plans, upon the payment of eight ($8) dollars, by addressing the Clerk of Council, Brunswick, Georgia.

For further information, apply to N. D. Russell, Clerk of Council, Brunswick, Ga., or E. R. Conant, Consulting Engineer, Brunswick, Georgia.

Bids: June 16.

Concrete and Structural Work

FREEPORT WATER WORKS COMPANY
Freeport, Pa.

Bids will be received between the hours of 10 A.M. and 1 P.M., June 16, 1919, at the office of the Freeport Water Works Company, Freeport, Pa., for the completion of the concrete work and structural work in connection with the proposed water plant. Detailed specifications and plans can be secured from the engineer, Leo Hudson, 801 House Bldg., Pittsburgh, Pa., or from J. R. Taylor, Manager, Freeport, Pa.

The right is reserved to reject any or all bids.

(Signed) J. R. TAYLOR.
Manager.

OFFICIAL PROPOSALS

Bids: June 11.

Concrete Stand Pipe

Kansas City, Mo.

Sealed proposals will be received by the Purchasing Agent of Kansas City, Mo., at his office in the City Hall, until 2 o'clock P.M. of June 11, 1919, for constructing and erecting complete a reinforced concrete stand pipe of 1,000,000 gallon capacity at 75th and Holmes Streets, Kansas City, Mo. All proposals shall be based upon and shall be in accordance with the plans and specifications approved by the Board of Fire and Water Commissioners and on file in the office of said Board.

The approximate quantities involved are as follows:

Reinforced concrete	1500 cu.yd.
Reinforcing steel	180 tons.
Earth excavation	420 cu.yd.

Copies of instructions to bidders, plans and specifications, form of proposal, form of contract and form of bond can be secured by communicating with the Purchasing Agent or the Chief Engineer and Superintendent of the Water Department.

Proposals shall be made upon the forms attached to specification and enclosed in a sealed envelope and addressed to the Purchasing Agent, City Hall, Kansas City, Mo., and marked on the outside, "Proposal for 1,000,000 gallon reinforced concrete stand pipe at 75th and Holmes Streets."

Each bid shall be accompanied by City Comptroller's receipt for deposit of cash or certified check drawn on a solvent Kansas City bank or trust company, made payable to the City Comptroller, in the amount of $750, which deposit shall be forfeited to the City in case the bidder, if successful, shall fail or refuse to enter into the contract and bond within ten (10) days after award of contract.

The Board of Fire and Water Commissioners reserves the right to reject any and all bids or to waive any informality or irregularity in any bid, when it shall appear to the interest of the City to do so.

J. RAY SAMUEL,
Purchasing Agent.
W. G. GOODWIN,
Chief Engineer and Superintendent.

Bids: June 17.

Constructing Two Bridges

Pineville, W. Va.

Sealed proposals will be received by the Clerk of the County Court of Wyoming County, at Pineville, West Virginia, up to 9 A.M., on Tuesday, June 17, 1919, for the construction of two bridges on West Virginia Project 1054, the Elmore-Herndon Road.

Proposals must be made upon standard forms, and must be accompanied by a certified check for at least 5 per cent. of the total amount bid.

Plans and specifications may be seen and proposals obtained at the office of the County Engineer, Pineville, W. Va., and at the office of the Division Engineer of the State Road Commission, Robson Prichard Bldg., Huntington, W. Va.

Proposals must be made upon the State Standard form.

The right is reserved to reject any and all bids.

WILL P. COOK,
County Clerk.

OFFICIAL PROPOSALS

Bids: July 5.

Paving

Brunswick, Ga.

Sealed proposals will be received by the County Commissioners of Glynn County, Ga., at the Court House, Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for the paving of four and four-tenths (4.4) miles, or approximately 46,400 sq.yd. of highway, extending from the City of Brunswick to the Picric Acid Plant, for which Federal Aid has been allotted.

Plans and specifications are on file in this office, in the office of the State Highway Engineer, Atlanta, Ga., and in the office of E. R. Conant, Brunswick, Ga. Copies of plans may be obtained from the engineer upon payment of $5.

Proposals shall be submitted on regular forms which will be supplied, together with specifications, upon application to Mr. Paul E. Twitty, Clerk of the County Commissioners, Brunswick, Ga. Proposals must be accompanied by a certified check, or money deposit, for five thousand ($5000) dollars, checks to be made payable to the County Commissioners of Glynn County.

The right is reserved to reject any or all bids and to waive all informalities.

(Signed) Commissioners of Glynn County.
BY P. E. TWITTY,
Clerk to Commissioners.
Brunswick, Georgia, May 31, 1919.
E. R. CONANT, Consulting Engineer.
Brunswick, Georgia.

Bids: July 2.

School Equipment

Fargo, N. D.

Sealed proposals will be received by the Board of Education, Fargo, N. D., for the equipment of the New Combination School, covering the following lettings:

1. Cabinet work.
2. Miscellaneous furniture.
3. Metal book stacks.
4. Metal locks.
5. Gymnasium equipment.
6. Kitchen equipment.
7. Pupils' desks and opera chairs.
8. Cork carpet.
9. Art drawing tables.
10. Window shades.
11. Printing equipment.
12. Wood working equipment.
13. Ash hoist.
14. Machine shop equipment.
15. Traverse curtains.
16. Stage scenery.
17. Clocks, bells, telephones and fire alarm system.
18. Electric light fixtures.

Proposals to be delivered to E. G. Guthrie, Secretary, Board of Education, Fargo, N. D., on or before 3 P.M., July 2, 1919.

Plans and specifications may be secured by application to Secretary Guthrie or Wm. B. Ittner, Architect, Board of Education Bldg., St. Louis, Mo.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, June 27, 1919, and then opened, for dredging in Pawtucket River, R. I. Further information on application.

OFFICIAL PROPOSALS

Bids: June 11.

Bridge Construction

STATE OF RHODE ISLAND
STATE BOARD OF PUBLIC ROADS

Providence, R. I.

Sealed proposals for the construction of State Bridges numbered 32, 72, 77 and 144, commonly known as Washington Bridge, Coventry Center Bridge, and Fairbanks Bridge in the Town of Coventry, R. I., and the Woonasquatucket River Bridge in the Town of Smithfield, R. I., will be received at the office of the State Board of Public Roads, Room 12, State House, Providence, R. I., until twelve o'clock noon, on Wednesday, June 11, 1919, at which time the proposals will be publicly opened and read. Each proposal must be submitted upon a blank form furnished by the Board and accompanied by a certified check for two hundred dollars ($200), payable to the State of Rhode Island.

The contract will include the erection of new concrete structures containing approximately 585, 90, 200 and 150 cu.yd. of concrete respectively.

Plans and specifications for this construction will be available on and after 10 A.M., Tuesday, June 3, 1919, and may be obtained from the office of the State Board of Public Roads by making a deposit of $10, which will be refunded upon return of plans and specifications complete and in good condition.

BENJAMIN F. ROBINSON,
ABRAM L. ATWOOD,
FRANK COLE,
MICHAEL VAN BEUREN
J. HENRY WOODARD,
State Board of Public Roads.

Bids: June 18.

Channel Construction

Portland, Oregon.

Sealed bids will be received by the City Council of the City of Portland, Oregon, until 10 o'clock A.M., June 18, 1919, for the construction as a district improvement of a channel from Columbia River to Columbia Slough, to serve as an outlet for sewers of the Peninsula Sewer District.

Plans and specifications for this work may be reviewed in the office of the City Engineer of Portland, or a copy will be sent on receipt of a deposit of twenty-five ($25) dollars.

The work consists of excavating	1,325,000 cu.yd.
Furnishing and placing riprap	20,000 cu.yd.

A certified check for 10 per cent. of aggregate bid must accompany each proposal.

The Council reserves the right to reject any and all bids.

O. LAURGAARD, City Engineer.

Bids: June 19.

Road Construction

Attleboro, Mass.

Sealed proposals for approximately one mile of bituminous road will be received at the office of the Mayor until 11 A.M., Thursday, June 19, 1919, where they will be publicly opened and read. Bids will be asked for both asphalt penetration and gravel mixed surfacing. A certified check for $250 must accompany each bid.

Further information may be obtained at the office of the Superintendent of Public Works, 27 Park St., Attleboro, Mass.

PHILIP E. BRADY, Mayor.
H. J. GOODALE, Supt. Public Works.

Bids: June 23.

Road Work

Wichita, Kansas.

Bids will be received at the office of the County Clerk, Sedgwick County, Wichita, Kansas, until 11 A.M., June 23, 1919, for the construction of 12 Miles of Road to be paved with brick or concrete base 18 ft. wide including the following quantities:

49,545	Cubic Yards Earth Excavation
3,802	Cubic Yards Earth Barrow
119,794	Square Yards Brick Pavement
1,114	Cubic Yards Concrete in Culverts
2,935	Linear Feet of Guard Fence
540	Linear Feet of Piling in place
968	Square Yards Concrete Shoulders
245	Square Yards of store Rip Rap in place
800	Linear Feet Concrete Gutter.

All Cement Coarse aggregate Brick reinforced Steel and Bitumen to be furnished by Sedgwick County F.O.B. nearest station. Detail plans and specifications are on file at the Office of County Engineer, Wichita, Kansas, the office of Engineering News-Record, 10th Ave. at 3th Street, New York City ,also Chicago Office of Engineering News-Record, 1570 Old Colony Bldg., or will be sent on application accompanied by deposit of $20 to M. Rosebury, County Engineer of Sedgwick, Wichita, Kansas.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

OFFICE OF THE COMMISSIONERS, D. C., May 27, 1919.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on June 23, 1919, for the construction of the substructure for the Rock Creek Pumping Station of the Sewage Disposal System, District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

Bids: June 25.

Steel Water Tower and Tank

Fountain Inn, S. C.

Bids are invited by the Town of Fountain Inn, South Carolina, for furnishing and delivering all material and constructing a steel water tower and tank for the municipal water-works system, upon foundations built by the town.

The capacity of the tank to be 50,000 gallons, and the height of the tower 110 ft. from top of foundation piers to floor of balcony.

Bidders will be required to furnish with their bids a certified check in the sum of $200, which will become a forfeit to the Town of Fountain Inn, if contract is not entered upon and bond executed promptly after the award.

The successful bidder will be required to execute a bond in an amount equal to 25% of his bid, with some satisfactory guarantee company, to safeguard the performance of the contract.

Bids will be opened at three o'clock P.M., June 25.

The Board of Public Works reserves the right to reject any or all bids.

Copies of specifications may be had by depositing $5, to be returned upon delivery of the specifications in good order to:

D. M. GARRETT,
Chairman, Board of Public Works,
Fountain Inn, S. C.

Bids: June 24.

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, HARRISBURG, PA.

Highway Work

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 24, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 1269 lin.ft. of reinforced concrete in Blair County; 10,870 lin.ft. of bituminous surface course on a concrete foundation and Hillside vitrified brick, and 9122 lin.ft. of bituminous surface course on a concrete foundation, in Columbia County; 12,725 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 24,765 lin.ft. of reinforced concrete in Dauphin County; 21,506 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete in Lancaster County; 31,548 lin.ft. of either one course reinforced concrete on a concrete foundation or vitrified brick in McKean County; and 9641 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 25,693 lin.ft. of reinforced concrete and Hillside vitrified brick in Northumberland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

U. S. ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 m., June 20, 1919, and then opened, for removing wreck of "Steamship Lord Dufferin," sunk in upper bay, New York Harbor. Information on application.

Bids: June 19.

Dam Construction

Gilboa, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Thursday, June 19, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie County, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts: An overfall masonry portion about 1300 ft. in length and having a maximum height of about 160 ft., and an earthen section approximately 1000 ft. long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Profitable Proposal Advertising

THE readers of ENGINEERING NEWS-RECORD are the active, progressive engineers and contractors of the civil engineering and contracting field. They look to this paper for information as to new projects and the development of established properties, from the time a bond issue or improvement is talked about until the work is completed.

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Engineering News-Record
10th Ave. at 36th St.
New York

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OFFICIAL PROPOSALS

Bids: June 25.

Sewer Construction

Lima, Ohio.

Sealed proposals for the construction of Collett Street Relief Sewer, Contract No. 1, will be received at the office of the Director of Public Service, City Hall, Lima, Ohio, until 12 o'clock noon, Central Standard Time (1 o'clock of so-called "Daylight Saving" Time), of the 25th day of June, 1919, and at that time and place will be publicly opened and read. The City of Lima reserves 30 days thereafter in which to act on the bids.

Alternate bids will be received for Monolithic Concrete, Segment Block or Reinforced Concrete Pipe as set forth on the blank form of proposal furnished by the City of Lima, Ohio. The total length of the sewers under this contract is about 16,430 ft., consisting of the following sizes: 84 in. circular; 78 in. by 127½ in. semicircular; 78 in. circular; 66 in. circular; 54 in. circular; 48 in. circular and 42 in. circular.

In addition there is an outlet abutment at the Ottawa River, an overflow chamber, together with special junctions at various points along the line of the proposed sewer.

The work to be done under this contract must be completed in accordance with the plans and specifications, not later than 30 months after the date of the award of the contract.

Copies of the plans, form of proposal, contract, bond and specifications may be inspected at any of the following offices:

Director of Public Service, City Hall, Lima, Ohio.

Fuller & McClintock, 170 Broadway, New York City.

Wm. G. Clark, 1047 Spitzer Building, Toledo, Ohio.

Copies of the plans and specifications with forms of proposal, contract and bond may be obtained at the office of the Director of Public Service, City Building, Lima, Ohio. A charge of seven ($7) dollars will be made for each set of plans and specifications. No charge will be made for the proposal bond.

Each proposal must be accompanied by a certified check upon a National Bank or Trust Company doing business in the State of Ohio, U. S. Government bonds or cash in the sum of seventeen thousand ($17,000) dollars, made payable to the City of Lima, Ohio.

The bidder to whom the contract is awarded will be required to furnish a surety company bond in the sum of 50% of his bid.

The City of Lima, Ohio, reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which he deems most favorable to the interest of the City of Lima, Ohio.

A. L. METHEANY,
Director of Public Service.
VAUGHN C. MILLER,
City Engineer.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc., for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

OFFICIAL PROPOSALS

Bids: July 5.

Paving

Brunswick, Ga.

Proposals will be received by the Mayor and Aldermen of the City of Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for paving certain streets in the City of Brunswick, Ga., approximating one hundred and five thousand (105,000) square yards.

Specifications can be had free; plans, upon the payment of eight ($8) dollars, by addressing the Clerk of Council, Brunswick, Georgia.

For further information, apply to N. D. Russell, Clerk of Council, Brunswick, Ga., or E. R. Conant, Consulting Engineer, Brunswick, Georgia.

Bids: June 19.

Road Construction

Attleboro, Mass.

Sealed proposals for approximately one mile of bituminous road will be received at the office of the Mayor until 11 A.M., Thursday, June 19, 1919, where they will be publicly opened and read. Bids will be asked for both asphalt penetration and gravel mixed surfacing. A certified check for $250 must accompany each bid.

Further information may be obtained at the office of the Superintendent of Public Works, 27 Park St., Attleboro, Mass.

PHILIP E. BRADY, Mayor.
H. J. GOODALE, Supt. Public Works.

Bids: June 16.

Concrete and Structural Work

FREEPORT WATER WORKS COMPANY

Freeport, Pa.

Bids will be received between the hours of 10 A.M. and 1 P.M., June 16, 1919, at the office of the Freeport Water Works Company, Freeport, Pa., for the completion of the concrete work and structural work in connection with the proposed water plant. Detailed specifications and plans can be secured from the engineer, Leo Hudson, 801 House Bldg., Pittsburgh, Pa., or from J. R. Taylor, Manager, Freeport, Pa.

The right is reserved to reject any or all bids.

(Signed) J. R. TAYLOR,
Manager.

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

PROPOSALS FOR DREDGING.—United States Engineer Office, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in East River, N. Y., will be received here until 12 m., June 16, 1919, and then opened. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office of the Secretary, Mississippi River Commission, 1311 International Life Building, St. Louis, Mo.—Sealed proposals will be received here until 11 a.m., June 19, 1919, for constructing about 200,000 cubic yards of earthwork by the hydraulic method in the Muscatine-Louisa Island Levee District, Iowa. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information on application.

OFFICIAL PROPOSALS

Bids: June 16.

Road Work

WASHINGTON COUNTY ROAD DISTRICT NO. 1.

Fayetteville, Arkansas.

Sealed bids will be received at the office of the Washington County Judge, B. F. Campbell, Fayetteville, Arkansas, until 2 P.M. June 16, 1919, and will then be publicly opened and read. The work contemplated is the building of 22.27 miles of limestone or gravel macadam road, between Springdale and the Madison County Line. The Commissioners reserve the right to accept either or both types of road. They also reserve the right to furnish the culvert tile, and the contractor is asked to bid both ways; furnishing hauling and placing, and just hauling and placing tile. Bids will be compared upon a basis of the Engineers' estimate, copies of which may be obtained free of cost from the Engineers or the Attorney of the District.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark.; at the office of the Board of Commissioners, Springdale, Ark., and at the office of the Engineers, Fayetteville, Ark.

Bids must be accompanied by a certified check, payable to the order of the Secretary of the District in the sum of 5% of the amount of the bid, and a construction bond of 25% of the contract will be required of the successfu lbidders.

The right is reserved to reject any or all bids.

Board of Commissioners Washington County Road District No. 1.
W. B. BROGDEN, President.
L. D. PETROSS, Secretary.
J. W. GRABIEL, Attorney.
Fayetteville, Ark.
HAMILTON & SHREVE, Engineers,
Fayetteville, Ark.

PROPOSALS FOR DREDGING.—U. S Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, June 27, 1919, and then opened, for dredging in Pawtucket River, R. I. Further information on application.

PROPOSALS FOR BOILERS.—Office of District Engineer, Mississippi River Dredging District.—Sealed proposals for furnishing and delivering three (3) Watertube Boilers for U. S. Dredge Kappa will be received here until two o'clock p.m., June 20, 1919, and then opened. Further information on application to the District

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PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR DREDGING—U. S Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M. June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened, for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

OFFICIAL PROPOSALS

Bids: June 23.

Road Work

Wichita, Kansas.

Bids will be received at the office of the County Clerk, Sedgwick County, Wichita, Kansas, until 11 A.M., June 23, 1919, for the construction of 12 Miles of Road to be paved with brick or concrete base 18 ft. wide including the following quantities:

49,545	Cubic Yards Earth Excavation
3,802	Cubic Yards Earth Barrow
119,794	Square Yards Brick Pavement
1,114	Cubic Yards Concrete in Culverts
2,935	Linear Feet of Guard Fence
540	Linear Feet of Piling in place
968	Square Yards Concrete Shoulders
245	Square Yards of store Rip Rap in place
800	Linear Feet Concrete Gutter.

All Cement Coarse aggregate Brick reinforeed Steel and Bitumen to be furnished by Sedgwick County F.O.B. nearest station. Detail plans and specifications are on file at the Office of County Engineer, Wichita, Kansas, the office of Engineering News-Record, 10th Ave. at 3th Street, New York City ,also Chicago Office of Engineering News-Record, 1570 Old Colony Bldg., or will be sent on application accompanied by deposit of $20 to M. Rosebury, County Engineer of Sedgwick, Wichita, Kansas.

Bids: June 24.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, HARRISBURG, PA.

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 24, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 1269 lin.ft. of reinforced concrete in Blair County; 10,870 lin.ft. of bituminous surface course on a concrete foundation and Hillside vitrified brick, and 9122 lin.ft. of bituminous surface course on a concrete foundation, in Columbia County; 12,725 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 24,765 lin.ft. of reinforced concrete in Dauphin County; 21,506 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete in Lancaster County; 31,548 lin.ft. of either one course reinforced concrete on a concrete foundation or vitrified brick in McKean County; and 9641 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 25,693 lin.ft. of reinforced concrete and Hillside vitrified brick in Northumberland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

OFFICIAL PROPOSALS

Bids: June 16.

Hydro-Electric Power Plant Construction

Marquette, Michigan.

Sealed proposals will be received by the City Commission of the City of Marquette at the office of the City Purchasing Agent, until 12 o'clock noon, June 16, 1919, for furnishing all equipment, tools, labor and material required for constructing the following specified improvements, such proposals to be publicly opened and read:

1. A hydroelectric power house, 40 x 97 of concrete and brick, including tail-race excavation in earth and rock;
2. A reinforced concrete surge tank thirty (30) feet diameter and sixty (60) feet high, including foundation;
3. Concrete foundations with timber saddles for a woodstave pipe line 90 in. inside diameter, 1800 ft. long, and 78 in. inside diameter, 285 ft. long.

Bids are to be submitted in two (2) ways:

First, on the work complete, contractor furnishing all materials.

Second, on labor and equipment, the City to furnish all materials, delivered f.o.b. Marquette, Michigan.

Separate proposals will be received for the power house building, embracing the superstructure above the main floor finished complete.

Proposals will be received for the foundation for the penstocks and separately for foundation of power house carried up to top of main floor ready to receive the brick superstructure and also including excavation for the tail-race.

Plans and specifications by Thomas W. Orbinson, Consulting Engineer, Appleton, Wisconsin, are on file at the office of Charles Retallic, Superintendent of the Department of Light and Power, Marquette, Michigan. Upon request, either or both sets will be mailed to prospective bidders on receipt of $25 for each set, which amount will be refunded on their return in good order.

Proposals for said improvement must be made in separate, sealed envelopes, marked so as to indicate improvement referred to and must be accompanied by a certified check or draft in the sum of $500, payable to the City of Marquette, as a guarantee that if bid is accepted, contract will be entered into and its performance properly secured.

The Commission reserves the right to accept or reject any or all bids.

Separate proposals will be received from pipe manufacturers for furnishing, erecting and connecting up the woodstave pipe.

CITY OF MARQUETTE,
J. F. ANDERSON,
City Purchasing Agent.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

OFFICIAL PROPOSALS

Bids: June 25.

Steel Water Tower and Tank

Fountain Inn, S. C.

Bids are invited by the Town of Fountain Inn, South Carolina, for furnishing and delivering all material and constructing a steel water tower and tank for the municipal water-works system, upon foundations built by the town.

The capacity of the tank to be 50,000 gallons, and the height of the tower 110 ft. from top of foundation piers to floor of balcony.

Bidders will be required to furnish with their bids a certified check in the sum of $200, which will become a forfeit to the Town of Fountain Inn, if contract is not entered upon and bond executed promptly after the award.

The successful bidder will be required to execute a bond in an amount equal to 25% of his bid, with some satisfactory guarantee company, to safeguard the performance of the contract.

Bids will be opened at three o'clock P.M., June 25.

The Board of Public Works reserves the right to reject any or all bids.

Copies of specifications may be had by depositing $5, to be returned upon delivery of the specifications in good order to:

D. M. GARRETT,
Chairman, Board of Public Works,
Fountain Inn, S. C.

Bids: July 2.

Physical Education Building

AT MARSHALL COLLEGE
HUNTINGTON, W. VA.

Huntington, W. Va.

Sealed bids will be received by the State Board of Control until 3 P.M. of July 2, 1919, at its office in Charleston, W. Va., for doing all work and furnishing all materials necessary to complete the building described below according to the plans and specifications of H. Rus Warne, architect, Charleston, W. Va.

One two story and basement building, 156 ft. x 68 ft. 2 in. Exterior press brick, trimming terra cotta. Composition roof. Interior mill construction. Wood truss, reinforced concrete and steel construction.

Basement contains two swimming pools enamel brick; lockers, showers, toilets, heater and filter room; high pressure boiler house heater and filters. Wood stairways.

First floor contains gymnasium, reception room, director's room and entrance hall. Wrought iron stairways.

Second floor contains upper part of gymnasium, running track and physical science room.

General contractors can secure plans and specifications by addressing the office of the State Board of Control, Charleston, W. Va., accompanying their request with check of $10, same to be refunded only when bid is received accompanied by Proposal Bond as required in the specifications, otherwise check to be retained.

Sub-contractors can secure plans and specifications by deposit of two five dollar checks, one of which will be refunded on return of plans and specifications.

STATE BOARD OF CONTROL.
J. S. LAKIN, Member.
Charleston. W. Va

Bids: June 27.

Flood Prevention Project

CONTRACT NO. 4

City of Lebanon, Pa.

Sealed proposals directed to the City Clerk will be received by the Mayor and Council of the City of Lebanon, Pa., at the City Hall until 5 P.M., Friday, June 27th, for the furnishing of all labor and materials required to construct Contract No. 4 of Lebanon's Flood Prevention Project.

The work consists of building a reinforced concrete culvert approximately 2,200 feet in length.

The approximate quantities involved are:

6,000 cubic yards of Excavation
2,000 cubic yards of Concrete
63,000 pounds of Reinforcement

Plans, proposal blanks and information concerning the manner of submitting bids can be obtained at the office of the City Engineer of Lebanon, Pa., by making a deposit of $5.00. This deposit will be refunded upon return, to the City Engineer, of the plans and specifications in good condition.

A certified check for $2,000 must accompany each proposal.

Mayor and Council distinctly reserve the right to reject any or all bids and to award the contract as is deemed to the best interests of the City of Lebanon, Pa.

PAUL A. VOLDNER,
City Engineer.

Attest:
DAN M. SHARP,
City Clerk.

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 1, Jefferson and Lincoln Counties, Arkansas, at the Office of the State Highway Department, Little Rock, Arkansas, up to 2 o'clock P.M., on June 26th, 1919, and there will be publicly opened and read, for the construction of 19 miles of gravel roads, 14 feet wide.

The approximate quantities are as follows:

47	acres Clearing & Grubbing
13	miles Fence Moving
85,600	cu.yds. earth excavation
1.45	miles Grading Machine Work (on old road)
696	lin.ft. 16" Reinforced concrete pipe, laid
168	lin.ft. 20" Reinforced concrete pipe, laid
392	lin.ft. 24" Reinforced concrete pipe, laid
72	lin.ft. 30" Reinforced concrete pipe, laid
1,025	cu.yds. Class A concrete in culverts
392	" " B " in abutments and headwalls
80,200	lbs. Steel reinforcing bars
3	80 ft. Steel Truss spans, erected
1,655	lin.ft. wooden pile bridges
40,250	cu.yds. gravel on which the haul is as follows:

6,450	cu.yds.	haul	0-1	mile
6,450	"	"	1-2	miles
6,450	"	"	2-3	"
6,450	"	"	3-4	"
7,010	"	"	4-5	"
4,040	"	"	5-6	"
2,150	"	"	6-7	"
2,150	"	"	7-8	"

Separate bids may be submitted for any one or all of the following items:

Concrete pipe, f.o.b. cars, Tamo or Furth, Ark.

Concrete in culverts, abutments and headwalls.

Steel trusses, erected.

Wooden bridges.

Gravel, f.o.b. cars, Tamo and Furth, Ark.

Plans and specifications are on file with the State Highway Department, Little Rock, Ark., and copies of same together with proposal forms can be obtained from the district engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00 of which $8.00 will be refunded on their return.

A certified check to the amount of 5% of the bid must accompany all proposals, check to be to the order of C. P. Clemmons, Sec'y of the district.

Successful bidders will be required to execute construction bond to the amount of 50% of their bids.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 1,
Jefferson & Lincoln Counties, Ark.
By E. P. LADD, President
C. P. CLEMMONS, Sec'y.

Bids: June 16.

Sewer Construction

Lansing, Mich.

The City of Lansing, Michigan, will receive sealed proposals for the construction of a sewer in West and Memphis Streets in accordance with the plans and specifications on file in the office of the city engineer of said city. Said sewer is 3000 ft. of 54 inch to 73 inch trunk sewer.

Bids will be received up to 4 o'clock p.m., June 16, 1919, at the office of the city clerk of the city of Lansing.

Each proposal must be accompanied with a certified check in the sum of $2000.00.

Right is rseserved to reject any or all bids.

J. A. PARSONS, City Clerk.

Bids: June 19.

Road Work

New Hampton, Ia.

Sealed bids will be received at the office of the County Auditor, New Hampton, Iowa, until 2 o'clock p.m., June 19th, 1919, for grading and incidental work on Sections F, G, and the west one-half of H, of the New Hampton and Lawler County Road.

Bids will be opened at the above office promptly after the time for receiving same has closed.

The proposed work consists of constructing two miles to finish grade requiring about 6585 cubic yards of dirt excavation.

Plans and specifications for the work may be seen and information may be secured at the above office or at the office of the County Engineer, New Hampton, Iowa, or at the office of the State Highway Engineer, Ames, Iowa. The County reserves the right to waive all technicalities and to reject any or all bids.

W. R. GARLAND,
County Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 4, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 9, 1919, for furnishing and delivering at the site the materials required for the construction of the United States Post Office building at Montevideo, Minn., including materials for concrete, reinforced concrete, stone, granite, brick, structural terra cotta, structural steel, miscellaneous iron and steel work, composition roofing, slate roofing, sheet metal work, skylights, plastering, interior marble, sanitary slate, lumber, millwork, painting, glazing, hardware, plumbing, heating, electric work, etc. Bills of quantities and specifications may be obtained from the Custodian of the site at Montevideo, Minn., or at this office, in the discretion of the Supervising Architect. Jas. A. Wet-

Bids: June 19.

Dam Construction

Gilboa, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 A.M., on Thursday, June 19, 1919, for Contract 203, for the construction of the Gilboa dam, in the Town of Gilboa, Schoharie County, New York. The dam is part of the Schoharie Watershed development for the New York City water-supply and is composed of two parts: An overfall masonry portion about 1300 ft. in length and having a maximum height of about 160 ft., and an earthen section approximately 1000 ft. long.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and contract drawings can be obtained at the above address, at the office of the Secretary, by depositing the sum of twenty dollars ($20) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer, at the above address.

JOHN F. GALVIN, President,
CHARLES N. CHADWICK,
L. J. O'REILLY,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: June 23.

Sewer Construction

Lansing, Mich.

The city of Lansing, Mich., will receive sealed proposals for the construction of a sewer in the forty-third sewer and drain district in said city, consisting of about 25,000 feet of trunk and lateral sewers 8 inch to 42 inches, in accordance with plans and specifications on file in the office of the city engineer of said city.

Proposals will be received up to 4 o'clock p.m., June 23, 1919, at the office of the city clerk of said city.

Each proposal to be accompanied with a certified check in the sum of $1000.00.

Right is reserved to reject any or all bids.

J. A. PARSONS, City Clerk.

Bids: June 16.

Dredging

Dover, Del.

Sealed proposals will be received by the Indian River Inlet Commission at the Office of the State Highway Department, Dover, Delaware, until one P.M., June 16, 1919, and publicly opened for dredging an inlet to Indian River Bay, in Sussex County, Delaware, involving approximately (20,000) twenty thousand cubic yards of excavation.

Monthly payments will be made for ninety per cent. (90%) of the work completed.

The right is reserved to reject any and all bids.

Detailed information may be obtained at the office of the State Highway Department, Dover, Delaware, Indian River Inlet Commission. Chas. M. Upham, Chief Engineer.

OFFICE OF THE COMMISSIONERS, D. C.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on June 23, 1919, for the construction of the Luzon Ave. Trunk Sewer, District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners.

OFFICIAL PROPOSALS

Bids: **June 20.**

Paving and Curbing

Newton, Iowa.

The City of Newton, Iowa, will receive bids until June 20th, 1919, for paving and curbing. Approximately 75,000 square yards. Brick, asphalt, concrete and asphaltic concrete being considered. Specifications and bidding blanks furnished on request to contractors.

E. G. FINCH,
City Clerk.

Bids: June 19.

Road Work

New Hampton, Iowa.

Sealed bids will be received at the office of the County Auditor, New Hampton, Iowa, until 2 o'clock p.m., June 19th, 1919, **for grading, tiling, surfacing with gravel and incidental work on the Iowa Federal Aid Project No. 35, part of New Hampton-Waterloo and New Hampton-Cresco Roads.**

Bids will be opened at the above office promptly after the time for receiving same has closed.

The proposed work consists of constructing 13 and 1-10 miles to finished grade requiring about 61,654 cubic yards of earth excavation, the construction of about 27,443' of 6 in. tile, 2109' of 8 in. tile and 220 of 12 in. tile, 32,925 cubic yards of gravel loading and 66,000 cubic yard miles of gravel hauling.

Plans and specifications for the work may be seen and information may be secured at the above office or at the office of the County Engineer, New Hampton, Iowa, or at the office of the State Highway Commission, Ames, Iowa. **The county reserves the right to waive all technicalities and to reject any and all bids.**

June 3, 1919

H. W. TANK, Auditor.

Bidding blanks for the above may be procured at the office of W. R. Garland, County Engineer.

Bids will be taken on tiling and road work separately.

Bids: June 20.

Sewers

Roselle Park, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Roselle Park, N. J., at 8:15 P.M., Friday, June 20, 1919 at the Borough Hall, for the construction of sanitary sewers in Colfax Avenue, Roselle Avenue, Lincoln Avenue, Filbert Street and Elm Street.

Approximate quantities are as follows:

5442 lin.ft. of 8-in. sewer.
23 Manholes.
352 Branches.

Each proposal must be accompanied by a certified check for $1000, drawn to the order of the Treasurer of the Borough.

Plans, specifications and forms of proposal may be obtained at the office of the Borough Engineer, 52 Vanderbilt Avenue, New York City and Roselle Park, N. J., upon payment of $3 per set. No refund for plans returned.

The Council reserves the right to reject any or all bids, to waive any or all defects or informalities, or to accept any bids as they may deem for the best interest of the Borough.

J. WALLACE HIGGINS,
Borough Engineer

Roselle Park, N. J.
June 6, 1919.

OFFICIAL PROPOSALS

Bids: July 8.

Road Construction

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., **Tuesday, July 8, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph County, to be let in sections. Said work having been heretofre let to Contract to the R. M. Hudson Paving and Construction Co. and not completed by it. And bids having been** received **therefore on June 2, 1919, and** rejected. **A certified check in the sum of $500 must accompany each bid, which will be forfeited as liquidated damages in case** bidder fails to comply if his bid is accepted. **The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.**

LEE CROUCH,
President of the County
Court of Randolph County.

THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for concrete, macadam, tarvia, warrenite and asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: June 18.

Water Main Extensions

Dearborn, Michigan.

Sealed bids will be received at the office of the Village Clerk, Dearborn, Mich., up to eight P.M., of the 18th day of June, 1919.

The work consists of the furnishing of all material and labor to construct the following amount of cast iron water mains:

27,600 feet of 6 inch
7,100 feet of 8 inch
7,150 feet of 10 inch, including all necessary valves and fittings, and hydrants, according to plans and specifications on file at the office of the Village Clerk and in the office of C. W. Hubbell, Consulting Engineer, 2348 Penobscot Bldg., Detroit, from who mcopies may be obtained upon deposit of $5, which amount will be refunded upon the return of the plans and specifications in good condition within 10 days after opening bids.

No bids will be received unless accompanied by a certified check for the sum of $7000, payable to the Village of Dearborn, to insure the signing of contract and the furnishing of proper and acceptable bonds for the full amount of the contract price within 10 days from time of notification of the award of contract.

The right is reserved to reject any or all bids.

By **order of the Village Commission.**

FRED C. ROAMER,
Village Clerk,
Dearborn, Mich.

OFFICIAL PROPOSALS

Bids: June 23.

Street Paving

Coatesville, Penn.

Sealed proposals addressed to the City **Clerk of the City of Coatesville,** Penn., **and endorsed, "Bids for** Paving Streets," **will be received by the City Council** at the **City Hall, Coatesville, Penn.,** up to eight **o'clock P.M., on Monday, June** 23, 1919, **and there publicly opened and** read.

The work to be done consists of approximately:

28,625	**sq.yd. of bituminous** pavement on a cement concrete base.
1,375	**sq.yd. of bituminous** pavement on **existing base.**
4,500	**sq.yd. of vitrified** brick pavement **to be relaid.**
4,300	**sq.yd. of vitrified** brick pavement **or stone block** pavement along **tracks.**
3,000	**lin.ft.** cement concrete curb.

Bids will be received on sheet asphalt, **asphaltic concrete, Warrenite,** Filbertine, **Amiesite and Bito-slag.**

Each proposal must be accompanied by **a certified check in an amount** equal to **five (5) per cent. of the highest** amount **bid, made payable to the Treasurer** of the **City of Coatesville, Pa.**

A surety bond in an amount equal to **fifty (50) per cent.** of the total amount **of the contract will be required** from the **successful bidder.**

Plans and specifications are on file in the **office of the City Engineer at** Coatesville **and copies of the same may be** obtained **by application and by the deposit** of five **(5) dollars which deposit will be** returned **if plans are returned in good** condition **within ten days after the opening** of bids.

The City Council reserves the right to **reject any or all bids or to** award the **contract as may be deemed** for the best **interests of the City.**

The contractor must comply with all the **requirements of the Workmen's** Compensation **Act of the State of Pennsylvania.**

WILLIAM S. G. COOK,
CHAS. A. NILES, City Clerk.
City Engineer.

Bids: June 16.

Motors and Pumps

Galesburg, Ill.

Sealed bids will be received by the City **Clerk of the City of Galesburg, Ill.,** until **five o'clock P.M., Monday, June 16, A. D. 1919, for the following:**

1—30 hp., 220 volts, three-phase, 60-cycle, **slip-ring type motor,** 1800 r.p.m.
3—40 hp., 220 volts, three-phase, 60-cycle, **slip-ring type motor, 1800 r.p.m.**
3—600 g.p.m., motor driven, direct connected, **centrifugal pumps.**

Specifications can be obtained at the office **of F. M. Connolly, City Engineer.**

Each bid must be accompanied by cash **or certified check for the amount** of not **less than 10% of the aggregate** of each **bid.**

The City of Galesburg reserves the right **to reject any or all bids.**

By order of the City Council.

WM. L. BOUTELLE,
City Clerk.

GATE-OPERATING MACHINERY.—U. S. **Engineer Office, First District,** Cincinnati, O.—**Sealed proposals will be** received **here until 2 P.M., July 8, 1919, and** then **opened, for furnishing and delivering** gate-**operating machinery for Dams Nos. 33 and 39, Ohio River. Information on** application.

OFFICIAL PROPOSALS

Bids: June 17.

Paving, Sewers, Pipe, Etc.

Murfreesboro, Tenn.

Sealed proposals will be received at the office of the Secretary of the Board of Commissioners, Murfreesboro, Tennessee, until 11 o'clock A.M., of the 17th day of June, 1919, then and there to be publicly opened and read by the Secretary for furnishing all labor, tools and certain materials for paving and other improvements. Separate bids will be entertained on the approximate quantities, as follows:

1—15,500 sq.yd. of asphaltic-concrete pavement.
400 lin.ft. vitrified brick headers.
500 cu.yds. earth excavation.
1,000 sq.yds. new macadam foundation.
2— 110 lin.ft. 30" concrete combination curb and gutter.
3,100 lin.ft. 24" concrete combination curb and gutter.
2,300 lin.ft. 18" concrete combination curb and gutter.
4,000 sq.ft. 24" concrete gutter.
500 sq.ft. concrete sidewalk.
12 catch basins.
60 ft. storm water culverts (without cast iron covers).
3— 850 ft. 8" vitrified clay pipe sewer.
200 ft. 10" vitrified clay pipe sewer.
900 ft. 6" vitrified clay pipe sewer relaid.
900 ft. 20" vitrified clay pipe sewer relaid.
4— 570 ft. 2" galvanized pipe laid.
1,600 ft. No. 6 B. & S. single conductor 5000-volt, armored cable, installed.
16 sidewalk outlets for cable.

All bids must be accompanied by a certified check or bond in the amount of 10% of the bid, made payable to the Treasurer of the City of Murfreesboro, Tennessee.

Plans and specifications may be obtained, upon deposit of $10.00, from C. B. Howard & Company, Engineers, 148 Fourth Ave., North, Nashville, Tennessee, which sum will be refunded on surrender of the plans and specifications in good condition.

The Board reserves the right to reject any or all bids.

J. T. RATHER,
Secy. Board of Commissioners,
City of Murfreesboro, Tenn.

Bids: June 14.

Pavement Construction

Willoughby, Ohio.

Sealed bids will be received by C. C. Jenkins, Village Clerk, for the construction of approximately 47,000 sq.yd. brick pavement 6 in. concrete foundation, cement grout filler, 33,000 lin.ft. concrete curbing and gutter, combined 12,000 lin.ft. storm sewers, 6 in. to 18 in. in said village until 12 o'clock noon, June 14, 1919, and publicly opened and read at the Council Chamber in said village.

Plans and specifications may be seen at the office of the Village Clerk, or may be obtained from the Village Engineer upon payment of ten dollars which will be refunded when same are returned in good condition. Certified check $500, payable to Village Treasurer. Council reserves the right to reject any and all bids.

C. C. JENKINS, Village Clerk.

OFFICIAL PROPOSALS

Bids: July 5.

Paving

Brunswick, Ga.

Sealed proposals will be received by the County Commissioners of Glynn County, Ga., at the Court House, Brunswick, Ga., until twelve o'clock noon, July 5, 1919, for the paving of four and four-tenths (4.4) miles, or approximately 46,400 sq.yd. of highway, extending from the City of Brunswick to the Picric Acid Plant, for which Federal Aid has been allotted.

Plans and specifications are on file in this office, in the office of the State Highway Engineer, Atlanta, Ga., and in the office of E. R. Conant, Brunswick, Ga. Copies of plans may be obtained from the engineer upon payment of $5.

Proposals shall be submitted on regular forms which will be supplied, together with specifications, upon application to Mr. Paul E. Twitty, Clerk of the County Commissioners, Brunswick, Ga. Proposals must be accompanied by a certified check, or money deposit, for five thousand ($5000) dollars, checks to be made payable to the County Commissioners of Glynn County.

The right is reserved to reject any or all bids and to waive all informalities.

(Signed) Commissioners of Glynn County.
By P. E. TWITTY,
Clerk to Commissioners.
Brunswick, Georgia, May 31, 1919.
E. R. CONANT, Consulting Engineer.
Brunswick, Georgia.

Bids: June 26.

24 Inch Out-Fall Sewer

Greenwich, Conn.

Pursuant to a resolution adopted June 4, 1919, the Joint Sewerage Commission of the Borough of Greenwich and the Town of Greenwich, Connecticut, will receive at its meeting to be held at the Town Hall, Greenwich, Connecticut, on Thursday evening, June 26, 1919, at eight (8) o'clock P.M., sealed proposals for furnishing all materials and doing all work required to complete the construction of a new 24 in. Out-Fall Sewer from the junction of the east side and west side trunk sewers to the Joint Sewerage Disposal Plant upon Grass Island for the Borough of Greenwich, and Sewer District No. 6, of the Town of Greenwich, Connecticut, including the necessary piping, piling, etc.

Plans may be seen and specifications and forms of proposal obtained at the office of the Joint Sewerage Commissioners, Room No. 2, Town Building, Greenwich, Connecticut, or at the Office of Mr. S. E. Minor, Civil Engineer, No. 96 Greenwich Avenue, Greenwich, Connecticut. Plans may be taken away upon the payment of ten ($10) dollars, the same to be refunded if plans are returned within fourteen (14) days in good condition.

Each bid must be accompanied by a certified check on a solvent bank for one thousand ($1000) dollars.

The said Joint Sewerage Commissioners reserve the right to reject any and all proposals and to waive any informality in the proposals received and to accept any proposal which it deems to be most favorable to the interest of the Borough and Town.

HARRY C. FROST, Chairman.
JOSEPH P. CROSBY, Warden.
ALBERT S. MEAD, Clerk.

OFFICIAL PROPOSALS

Bids: July 2.

Boilers and Stokers

Lorain, Ohio.

Sealed proposals will be received by the Board of Education, Lorain, Ohio, until 12 o'clock noon, July 2, 1919, for the installation of water tube boilers and stokers and erection of a radial brick chimney at the High School Boiler House as per plans and specifications prepared by the Watson Engineering Co. of Cleveland, Ohio.

Plans and specifications are on file at the office of the Clerk of the Board of Education, Lorain, Ohio, and at the office of the Watson Engineering Co., 1101 Hippodrome Bldg., Cleveland, Ohio.

Bidders shall be required to state when they will begin and finish the work after the contract shall have been entered into.

Each bid must contain the name of every person interested in the same and must be accompanied by a certified check, payable to the Board of Education of Lorain, Ohio, in the sum of $500 as a guarantee, that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

Proposals must be sealed up, addressed to the Clerk and indorsed on the outside, plainly showing the items bid upon and the name of bidder.

The Board reserves the right to reject any, part of any or all bids or proposals.

A satisfactory bond of not less than fifty (50) per cent. of the contract price will be required on all contracts.

By order of the Board of Education, Lorain, Ohio.

E. BRUELL,
Clerk.

Bids: June 10.

Sewer Construction

OFFICE OF THE COMMISSIONER OF
PUBLIC WORKS,
SAGINAW, MICHIGAN.

Sealed proposals will be received by the City Clerk, until Tuesday, June 10, 1919, and until such time on said day as the Council in session shall order the opening of such proposals, for

CONSTRUCTING A REINFORCED CONCRETE OR SEGMENT BLOCK SEWER IN

Florence and Salt Streets, on Florence Street from a point 100 ft. E. of center line of Queen Street to Salt Street, and on Salt Street, from Florence Street to Holmes Street, all in accordance with the plans, specifications and detailed information on file in this office and in the office of the City Clerk. Work shall commence not later than July 15, 1919, and be completed not later than December 1, 1919.

Proposals must be made upon printed forms which will be furnished by this department upon application, and must be accompanied by cash or certified check of a responsible bank, payable to the order of the City Treasurer, in an amount as determined by the Council. The successful bidder will be required to furnish a surety company bond in a sum of not less than twenty-five (25) per cent. of the amount of the contract, to secure the faithful performance of the contract. The right is reserved to reject any and all bids.

ROBERT F. JOHNSON
Com. of Light, Water and Sewers

OFFICIAL PROPOSALS

Bids: June 23.

Furnishing Oil and Asphalt

Woonsocket, R. I.

Sealed proposals will be received by the Aldermanic Committee on Streets and Bridges of the City of Woonsocket, R. I., at the Aldermen's Chambers, City Hall, Woonsocket, R. I., until 8:15 P.M., Monday, June 23, 1919, at which time and place proposals will be publicly opened and read. Said Committee will be in session at 8 P.M. on said date for the purpose of receiving proposals for the following:

NO. 1. OIL—For furnishing 100,000 gallons, more or less, of oil for the City of Woonsocket, R. I., suitable for street oiling and containing not less than 45 per cent. asphalt. Specification for oil to be furnished by the bidder. Agreement and City Specifications may be seen at the office of the City Engineer.

NO. 2. ASPHALT—For furnishing five hundred (500) barrels, more or less, of asphalt binder for macadam roadways, penetration method. The bid must specifically state the name, nature and analysis of the asphalt binder and bid must be accompanied with a sample of at least one pound. Specification must accompany proposal.

Certified check for $100 must accompany proposal for oil, and certified check for $100 must accompany proposal for asphalt, as surety that if proposal is accepted a contract will be entered into.

The right is hereby reserved to reject any or all bids as the interest of the City may appear.

ADRIAN H. SYLVESTRE, Chairman,
JAMES F. CARROLL,
ANTHONY BELANGER,
Aldermanic Committee on
Streets and Bridges.
FRANK H. MILLS, City Engineer.

Bids: June 17.

Paving

Henderson, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Hnderson, N. C., at City Hall, in Henderson, N. C., until 4 P.M., June 17, 1919, for Street Improvements.

The work will consist of about:

55,000 sq.yd. of asphalt, bitulithic, concrete, brick or other pavement.
7,000 lin.ft. of granite or concrete curb.
7,000 lin.ft. of concrete gutter.
9,000 sq.yd. of sidewalk.
18,000 cu.yd. of grading.

And the necessary drainage, etc.

It is expected that additional work will be done later.

Proposals must be marked, "Proposals for Street Improvement."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $5000 as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Henderson and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C.

The right is reserved to reject any or all bids.

M. H. STONE, Mayor.
GILBERT C. WHITE, Engineer,
Durham, N. C.

OFFICIAL PROPOSALS

Bids: June 23.

Paving

Geneva, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Geneva, N. Y., at its office in the City Hall, until 7:30 o'clock P.M., Monday, June 23, 1919, for paving High, West and Brook Streets. The work for which proposals are invited consists of the following approxmiate quantities:

5,400 cu.yd. of excavation.
8,750 lin.ft. of curb and gutter.
175 lin.ft. of header.
8,750 lin.ft. of 3 in. drain tile.
3,000 lin.ft. of vitrified pipe.
30 catch basins.
10,000 sq.yd. of brick, asphalt or concrete pavement.

Each proposal must be accompanied by a certified check for five (5%) per cent. of the amount of the proposal.

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Specifications and blank forms of proposals can be obtained upon application to the Board of Public Works. Plans may be seen at the office of the City Engineer.

The right is reserved to reject any or all bids.

H. K. SEYBOLT,
Superintendent.

Bids: July 2.

Road Reconstruction

Burlington, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Burlington County, N. J., for the reconstruction of the Camden County line, Marlton-Medford Road, in the township of Evesham, in the county of Burlington, with a sheet asphalt surface upon a macadam foundation; estimated amount of surface pavement required is 31,680 sq.yd., and opened and read in public at the Court House, Mount Holly, N. J., on Wednesday, July 2, 1919, at 11 A.M.

Specifications and form of bid, contract and bond for the proposed work prepared by James Logan, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said Engineer at No. 11 Main St., Mt. Holly, N. J., and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to Harry Hawkins, Jr., Clerk of the Board of Chosen Freeholders, and must be accompanied by a certificate from a Surety Company to furnish bond and a certified check for not less than $1000, and be delivered at the place and on the hour above named. The standard proposal forms are attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of the Board of Chosen Freeholders.

HARRY HAWKINS, JR.,
Clerk.

OFFICIAL PROPOSALS

Bids: July 1.

Construction, Heating, Etc.

Middletown, N. Y.

Sealed proposals for construction, heating, sanitary and electric work, new building for chronic patients, Middletown State Homeopathic hospital, Middletown, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3246, 3247, 3248 and 3249. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Middletown State Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Caiptol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.
Dated: May 29, 1919.

Bids: June 16.

Electrifying Pumping Station

DEPARTMENT OF PUBLIC WORKS

Lackawanna, N. Y.

Sealed proposals for work, materials and supplies for electrifying the Pumping Station, will be received by the Board of Common Council of the city of Lackawanna, at the city building until 8 o'clock in the afternoon of Monday, June 16, 1919, at which place and hour the said bids will be publicly opened and read. No proposals will be considered unless it be accompanied by a duly certified check, payable to the order of the City Clerk, of the City of Lackawanna, such check to represent 25 per cent. of the amount named in the proposal or by a bond to represent 50 per cent. of the sum named in the proposal.

The Common Council reserves the right to reject any and all bids and waive any informalities or to divide said contract if in the judgment of the Common Council, the interest of the city requires it.

To ELECTRIFY THE PUMPING STATION

Plans and specifications and extent of quantities can be seen and any desired information can be had and obtained on application to the office of the Commissioner of Public Works, of the city of Lackawanna, on and after this date.

By order of the Common Council of the city of Lackawanna, as set forth in its proceedings at a meeting held June 2, 1919.

Dated: Lackawanna, N. Y., June 3, 1919.

JOSEPH O'CONNOR,
City Clerk.
Pub. June 5, 1919.

Bids: June 18.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS
Springfield, Ill.

Notice is hereby given that sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 10 o'clock A.M., June 18, 1919, for the road work on the Natoinal, Chicago-Joliet, Dixie and Peoria-Springfield Highways, designated by county and section below. All bids shall be on regular forms furnished by the Department.

Plans for all the work may be examined in the offices of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois. Plans for the sections in the County of Effingham may be examined in the office of District No. 6, Chas. M. Slaymaker, District Engineer, 510 Metropolitan Bldg., E. St. Louis. Plans for the sections in the Counties of Cook and Will may be examined in the office of District No. 1, H. B. Bushnell, District Engineer, 138 Fox Street, Aurora, Illinois. Plans for the section in Iroquois County may be examined in the office of District No. 4, R. L. Bell, District Engineer, Buchanan-Link Bldg., Paris, Illinois. Plans for the work in Mason Co. may be examined in the office of District No. 5, Fred Tarrant, District Engineer, 506½ East Monroe Street, Springfield, Illinois.

Route	County	Sec.	Width Feet	Approximately Length-Feet
National Highway	Effingham	I	16	22,445
National Highway	Effingham	J	18	7,724
National Highway	Effingham	K	18	10,425
National Highway	Effingham	L*	30	22,459
National Highway	Effingham	M	16	17,994
National Highway	Effingham	N	16 and 18	27,887
National Highway	Effingham	G-15d	18 and 16	21,000
Chicago-Joliet Highway	Cook	B	20 and 18	30,635
Chicago-Joliet Highway	Cook	C	18	35,847
Chicago-Joliet Highway	Will	D	18 and 20	27,450
Dixie Highway	Iroquois	3	16	27,304
PeorisPeoria-Springfield Highway	Mason	M-†	16	4,678

*No pavement on this section—Earth work and culverts.

Plans will not be sent to prospective bidders but upon making a deposit with the District Engineer having the plans, they may be obtained for temporary use while inspecting the conditions attending the work in question.

Except as noted,

Alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3, or CT); bituminous concrete without binder course (Specifications C1, C2, C3, or CT).

†In addition, bids will be received on the same date at Mason City, Illinois, by Mason City for certain street paving that will widen Section M considerably. Section M and the additional paving to be awarded by Mason City will not be let separately from one another, and consequently bidders wishig o submit proposals for Section M should obtain from Mason City proposal forms upon which to submit proposals for the city paving.

Cement will be furnished for all sections by the Department of Public Works and Buildings or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer having the plans.

By Order of The Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: July 16.

Water Mains and Appurtenances

Decorah, Iowa.

Sealed proposals will be received by the Mayor and City Council of the City of Decorah, Iowa, at 7:30 P.M., July 16, 1919, at the office of the City Clerk, in the said City, for laying approximately 11,400 lin.ft. 4 in. water main, and making necessary connections, as to valves, T's, L's and fire hydrants; also connecting with old mains where they intersect, the contractor to furnish labor, lead and oakum; bids will also be received for relaying of approximately 600 ft. of 10 in. vitrified sewer pipe.

Specifications showing schedule of streets, together with blank forms for bidders can be obtained at the office of the City Clerk, City Hall, Decorah, Iowa.

All bids must be accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workmen's Compensation Act of Iowa.

The Council reserves the right to reject any or all bids and to award the work as may appear to be for the best interests of the city.

MARK D. WELLS,
City Clerk.

Bids: June 25.

Street Paving

DEPARTMENT OF STREETS AND
PUBLIC IMPROVEMENTS
Reading, Pa.

Sealed proposals will be received at the office of the City Clerk, Reading, Pa., until 10 A.M., Wednesday, June 25, 1919, for the construction of paving and appurtenances on various streets in the City of Reading.

Approximate quantities are 17,000 sq.yd. sheet asphalt, 9000 sq.yd. vitrified block and 650 sq.yd. wood block.

All necessary forms for bidding, plans, specifications and any other information may be obtained at the office of the City Engineer, City Hall, Reading, Pa. A deposit of five dollars ($5) will be required for each set of asphalt or block plans and specifications taken from the office, which deposit will be remitted to bidders upon return of plans before July 1, 1919.

Proposals must be endorsed as to the character of paving bid on and addressed to the Superintendent of the Department of Streets and Public Improvements, in care of the City Clerk, Reading, Pa.

The right is reserved to reject any or all bids.

JACOB H. McCONNELL,
Superintendent.
EDMUND B. ULRICH, City Engineer.

Bids: June 23.

Waterworks Improvements

Lusk, Wyoming, June 3, 1919.

Sealed bids for improvements and extensions to the Municipal Water System will be received by the Town Council of the Town of Lusk, Wyoming, up until 8 o'clock P.M., June 23, 1919, and then and there publicly opened and read.

The plan embraces the furnishing and installing of approximately 12,850 ft. of four inch, 1700 ft. of six inch, 3300 ft. of eight inch, 1330 ft. of ten inch and 4950 ft. of twelve inch cast iron pipe Class "B" American Waterworks Standard, according to plans and specifications on file in the offices, or the Town Engineer. Of the twelve inch pipe, 1750 ft. may be replaced by fourteen inch.

Hydrants and valves will be furnished by the Town, separate bids on which will be received at the same time as the foregoing. Forty-five fire hydrants and sixty valves, four to fourteen inch, with valve boxes, American Waterworks Standards will be required.

Bids for the principal work must be accompanied by certified check for five thousand dollars ($5000), made payable to the Town Treasurer, without recourse. Bids for hydrants and valves must be accompanied by certified check for at least ten per cent. of the gross bid.

Plans, specifications, proposal forms, form of contract and form of bond can be procured from R. F. Gray, Town Engineer, upon deposit of ten dollars ($10.00) which will be refunded upon their return in good condition not later than the day after opening of bids.

The Town Council reserves the right to reject any and all bids, to waive irregularities and to award the contract as may be deemed best for the interests of the Town.

GEORGE H. HOWES,
Mayor.
D. E. GODDARD,
Clerk.
R. F. GRAY,
Engineer.

Bids: June 23.

Street Improvement

North Adams, Mass.

Sealed bids will be received by the Commissioner of Public Works, City Hall, North Adams, Mass., until 4 P.M., June 23, 1919, for the following street improvements, consisting of about:

- 4600 sq.yd. of concrete roadway on Zylonite Road.
- 1700 sq.yd. of concrete roadway with 600 sq.yd. of brick paving on Beaver Street.
- 4500 sq.yd. of bituminous macadam top surface, to be laid over old water bound macadam on Beaver Street.
- 1300 lin.ft. of concrete combination curb and sidewalk on Beaver Street.

Each bid must be marked, "Proposals for Street Improvement," and to be accompanied by a certified check for not less than 5% of the price bid, payable to the Treasurer of the City of North Adams, Mass., as a guarantee that if the contract is awarded, it will be executed within ten days of notice of award.

Specifications may be had at the office of the Commissioner.

The right is reserved to reject any or all bids.

JACKSON L. TEMPLE,
Commissioner of Public Works.
June 9, 1919.

OFFICIAL PROPOSALS

Bids: July 1

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, the 1st day of July, 1919, for the improvement of the following highways:

Albany—One highway: 3.93.
Herkimer—Two highways: 5.84 and 5.67.
Oneida—One highway: 0.45.
Putnam—One highway. 3.33.
Saratoga—Two highways: 9.06 and 1.52.
Suffolk—Two highways: 6.59 and 4.99.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

Cattaraugus—One highway: 6.98.
Cayuga—Two highways: 3.89 and 4.39.
Cortland—One highway: 6.07.
Erie—One highway: 6.03.
Franklin—One highway: 1.99.
Hamilton—One highway: 5.01.
Jefferson—One highway: 4.05.
Madison—One highway: 5.65.
Niagara—One highway: 8.00.
Schenectady—One highway: 5.62.
Wayne—One highway: 5.85.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

Rensselaer—One contract, reconstruction.
Ulster—One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved, completed or repaired are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
ROYAL K. FULLER,
Secretary.

Bids: June 23.

Centrifugal Pump

City of Bethlehem, Pa.

Bids will be received by the Bureau of Water for the furnishing and installation of a two million gallon electrically driven centrifugal pump, on or before June 23, 1919.

The right is reserved to reject any or all bids.

R. L. FOX,
City Engineer.

Bids: June 23.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS AND FERRIES,
550 Bourse Building,
Philadelphia, Pa.

Sealed proposals, endorsed "Bids for the construction, with appurtenant work, of Penn Treaty Recreation Pier, No. 57, North Delaware River, will be received until 12 o'clock noon, Monday, June 23, 1919, in room No. 550, Bourse Building, Philadelphia, and then publicly opened.

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned upon the deposit of a certified check in the sum of $25, to cover costs of blue prints, which check will be returned upon the receipt of the plans and specifications in good condition.

Proof must be submitted the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation insurance, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500 have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER, Director.

Bids: June 17.

Paving

Fort Collins, Colo.

The City of Fort Collins, Colo., will receive until 1 P.M., June 17, 1919, sealed bids for the following work, (more or less):

37,710	sq.yd. of reinforced concrete pavement.
5,984	cu.yd. of earth excavation.
4,469	lin.ft. of concrete curb and other incidentals.

Plans and specifications may be seen at the Engineer's Office or secured upon deposit of $5, which will be refunded to unsuccessful bidder upon their return.

W. B. CHEECK,
City Engineer.

U. S. ENGINEER OFFICE, Louisville, Ky. Sealed proposals will be received here until 12 noon (central time) ,June 19, 1919, and then opened for constructing Lock and Abutment for Dam No. 45, Ohio River, at Addison, Ky. Further information on application.

Bids: June 19.

Harrisburgh, Pa.

Bridge Construction

Pennsylvania State Highway Department, Harrisburg, Pa. Sealed proposals will be received at the State Capitol until 10 A.M., June 19, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the construction of the following bridges:

County	Township	Route	Station	Span in Ft.
Adams	Franklin	43	202	30
Adams	Franklin	43	183	2/28
Adams	Cumberland	43	79	30
Adams	Cumberland	44	108	14
Adams	Mt. Joy	375	207	20
Centre	Potter	307	774	16
Centre	Boggs	219	1993	10
Centre	Patton	346	1339	12
Clinton	Beech Creek	219	2792	10
Clinton	Beech Creek	219	2865	18
Cumberland	Middlesex	40	265/60	8
Dauphin	Mifflin	336	1320	10
Dauphin	Upper Paxtang	339	200	6
Huntingdon	Logan	55	1827	4
Huntingdon	Morris	260	1188	6
Huntingdon	West	352	289	10
Huntingdon	Logan	55	1846	4
Juniata	Fermanagh	194	236	8
Juniata	Delaware	275	32	24
Juniata	Delaware	275	188	20
Juniata	Delaware	275	180	20
Juniata	Monroe	194	743	20
Juniata	Fayette	194	440	30
Juniata	Delaware	275	18	30
Lancaster	Sadsbury	215	806/25	12
Lancaster	Earl	137	1592	12
Lebanon	Union	140	225	5
Lebanon	South Londonderry	280	558	24
Lebanon	South Annville	280	358	8
Lebanon	East Hanover	140	930	16
Lebanon	Bethel	141	1116	10
Lebanon	Bethel	141	1081/10	12
Lebanon	Bethel	140	1059	12
Perry	Carroll	40	532	24
Snyder	Washington	149	1530	12
Snyder	Perry	195	2293	12
Snyder	Spring	28	521	12
Snyder	Beaver	28	426	12
Snyder	Beaver	28	497	12
Snyder	Washington	194	1564	16
Snyder	Washington	194	1554	16
Snyder	Washington	194	1607	8
Snyder	Washington	194	1642	8

Plans and specifications will be furnished upon application to the State Highway Department, Harrisburg, Pa. They can also be seen at the office of the State Highway Department, Harrisburg, 1001 Chestnut St., Philadelphia, 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner

My Specialty Is—

Good service in securing contract bonds and contractors' insurance for contractors whose record will stand inspection. Swart Service increases your standing and prestige with the surety companies. It does.

Swart Service Really Serves

TRY ME OUT

HARMON V. SWART
19 Liberty Street, New York

SUB-GRADING CONTRACTS DESIRED

Our equipment consists of the following: 3—No. 3 Keystone Excavators: 1—No. 6 Keystone Excavator, Koppel Cars, Track, Plymouth Locomotives and team outfit.

DANIEL J. LYNCH CO., Inc.
201-2 Colonial Trust Bldg., Philadelphia, Pa.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: July 7.

Concrete Bridge Construction

Elmira, N. Y.

Sealed proposals for the construction of a concrete bridge approximately 830 feet long and 30 feet high, consisting of eight arches, over the Chemung River at Main Street in the City of Elmira, Chemung County, New York, will be received by the Board of Public Works of the City of Elmira, N. Y., at the office of the City Clerk in the City Hall, until 11:00 o'clock A.M., Monday, July 7, 1919, and publicly opened at that time.

Bids must be made upon proposal blanks attached to the specifications, and must be accompanied by a Certified Check in a sum equal to at least five per cent. (5%) of the amount of the bid and made payable, without reservations, to the order of the Mayor of the City of Elmira, N. Y.

Plans and specifications may be seen at the office of the City Engineer in the City Hall, Elmira, N. Y. Copies of the plans and specifications may be had by making a deposit of Ten Dollars ($10.00), which deposit will be returned when plans are returned in good condition on or before the date of the letting.

The right is reserved to reject any or all bids.

LOUIS C. ANDREW,
Clerk of the Board of Public Works
of the City of Elmira, N. Y.

Bids: June 20.

Highway Work

DEPARTMENT OF PUBLIC WORKS
Manchester, N. H.

Sealed proposals for paving certain highways will be received at the office of the Department of Public Works, City Hall, Manchester, N. H., until 2 o'clock P.M., June 20, 1919, and at that time and place all proposals will be publicly opened and read and no proposal will be received after that time.

DESCRIPTION OF WORK

Proposals are hereby called for on sheet asphalt, Topeka or bitulithic surface laid on concrete or broken stone foundation, including all excavation, grading, incidental work, etc., on the following highways together with the approximate amount to be expended and not to be exceeded on the several locations.

Elm St., between Orange St. and Webster St.	$28,787.59
Bridge St., between Belmont St. and Highland St.	$17,635.18
Stark St., between Elm St. and Canal St.	$13,153.69
Cedar St., between Elm St. and Pine St. and Birch St., between Lowell St. and Bridge St.	$14,953.92
Spruce St., between Union St. and Maple St. and Beech Street., between Spruce St. and Auburn St.	$14,932.61
Second St., between Granite St. and Cleveland St.	$15,291.80
South Main St., A St. to Bedford Line	$11,545.84

All proposals shall be submitted on blank forms which may be obtained at the office of the Department of Public Works. Each proposal shall be accompanied by a certified check of a responsible bank or trust company for Seventy-five hundred $(7500) Dollars payable to the City Treasurer of the City of Manchester, N. H., said check to be returned to the bidder unless he fails to execute the contract should it be awarded to him.

Information and specifications may be had upon application at the office of the Department, plans and profiles may be seen at the office of the City Engineer.

A bond will be required for the faithful performance of the contract in a sum to be fixed by the Director after the bids are opened, said sum to be approximately one-third (⅓) of the estimated amount of the contract, the sureties to be satisfactory to the Commissioners of Public Works.

The contractor to whom the contract may be awarded shall appear at the office of the Department of Public Works with the surety offered by him within three (3) days after the awarding of the contract, and execute the same and in case of failure or neglect to do so, he will be considered as having abandoned the same and shall forfeit the check accompanying his proposal.

The Director of the Department of Public Works expressly reserved the right to reject any or all proposals.

DEPARTMENT OF PUBLIC WORKS,
SAMUEL J. LORD, Director.

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 2, Cleveland County, Arkansas, at the office of the State Highway Dept., Little Rock, Ark., up to 4 o'clock P.M., on June 26th, 1919, for the construction of 10⅓ miles of road. Bids are asked on Clearing and Grubbing, Culverts, Bridges and Grading, only, at this time.

The approximate quantities are as follows:

28	acres Clearing and Grubbing.
4	miles Fence Moving.
35,000	cu.yds. Earth Excavation.
1.5	miles grading machine work.
216	cu.yds. Class A concrete.
119	" " B concrete.
504	lin.ft. Concrete or Corr. Iron Pipe, 18 inch.
622	lin.ft. Concrete or Corr. Iron Pipe, 24 inch.
3	40 ft. Steel Truss spans erected.
1	60 ft. " " " "
1	80 ft. " " " "
260	lin.ft. Wooden Pile Bridges.

Separate bids may be submitted for any one or all of the following items:

Concrete or Corrugated Iron Pipe, Concrete in culverts and bridge abutments, Steel bridges erected, Wooden bridges erected.

Plans and specifications are on file with the State Highway Dept., Little Rock, Ark., and copies of same, together with proposal forms may be obtained from the District engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00, of which amount $8 will be refunded upon their erturn.

A certified check to the amount of 5% of the amount bid msut accompany each proposal, check to be made to the order of the President of the Board of Commissioners of said district.

Successful bidders will be required to furnish a construction bond to the amount of 25% of their contract price.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 2,
Cleveland County, Arkansas.
By M. F. STANFIELD, President.

Bids: July 7.

Bridge Construction

McAlester, Okla.

Notice is hereby given that sealed proposals for the construction of Highway Improvement in Pittsburg County, Oklahoma, will be received by the County Commissioners of Pittsburgh County, in the office of the County Clerk of said County, at McAlester, Oklahoma, until two o'clock P.M., Monday, July 7th, 1919. Said bids will then be publicly opened.

Description of work to be done:

To construct a steel Highway Bridge across Gaines Creek, approximately four (4) miles northeast of Canadian, Oklahoma, of approximately 354 feet in total length, consisting of three (3) spans of approximately 118 feet in length, and the necessary abutments and piers therefor, width of roadway 18 feet.

Detailed plans, specifications, estimates and form of proposal sheet may be seen for examination at the office of the County Engineer or the County Clerk, in McAlester, Pittsburg County, Oklahoma, or at the office of the State Engineer, in Oklahoma City, Oklahoma, or may be obtained by depositiing $5.00 with the County Engineer at McAlester. Such deposits will be returned only upon the return of the plans in good condition within two weeks after the letting.

A certified check for $1000.00 drawn upon some bank in the State of Oklahoma, and made payable to the County of Pittsburg, State of Oklahoma, must accompany each proposal. The right is reserved to reject any and all bids.

Proposals shall be submitted in sealed envelopes and marked "Bids for the Construction of Gaines Creek Bridge near Canadian, Oklahoma."

Proposals may be sent by mail, and when sent by mail shall be enclosed in an additional sealed envelope and marked as indicated above. All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the County Commissioners and will not be returned to the bidders.

W. J. KINDRICK, County Clerk.

Bids: June 23.

Street Improvement

Jackson, Tenn.

Sealed proposals will be received by the undersigned until 10 o'clock A.M., on June 23rd, 1919, for improving certain streets and alleys in the city of Jackson, Tennessee, in accordance with ordinances Nos. 48 to 62 inclusive, all in accordance with plans, profiles and specifications prepared and on file in the Office of the City Commissioners approximating 52,000 square yards of Street Asphalt on a Concrete Base, 3350 Square Yards of Sheet Asphalt on a Macadam Base, 5300 Square Yards of Concrete Pavement, 1200 Lineal Feet of Concrete Curb, 3300 Square Yards of Brick Gutter, 6000 Lineal Feet of 12" to 24" Vitrified Pipe, and necessary inlets and manholes. Each bid must be accompanied by a certified check made payable to the City Recorder of Jackson, Tenn., for not less than Ten (10) per cent. of the cost of the entire work computed on the basis of the bid submitted. The right is reserved to reject any or all bids. Specifications and additional information can be obtained at the office of the City Commissioners, Jackson, Tenn. At 10 o'clock on said date, June 23, 1919, all bids will be opened and publicly read.

J. T. McCUTCHEN, Commissioner of Street.s

Bids: July 1.

Macadam Construction

Lewisburg, W. Va.

Until noon, July 1st, 1919, sealed bids will be received by the County Court of Greenbrier County, for the construction of 2 miles of Penetration Macadam pavement 16 feet wide, beginning at the end of the present pavement, three miles north of the town of Lewisburg and extending along the Marlins Bottom Turnpike. Grading has been done and local limestone will be used. haul 1 mile. For specifications and information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

BURNS & MORGAN
LOCAL
CONTRACTORS
Engineering
News-Record

We'll have to figure closer, Jim—
they're advertising that contract in the

Engineering News-Record

Local bidders figure closer when they find that the letting of a contract is being advertised in the ENGINEERING NEWS-RECORD. Through its 33,000 circulation, ENGINEERING NEWS-RECORD reaches the worthwhile contractors all over the country. Numberless municipalities have saved thousands of dollars on contracts through very small investments in NEWS-RECORD Official Proposal advertising. The publication of such advertising is an official notice that bids are wanted from both local and OTHER contractors. Contractors who bid on work outside of their own city look for such contracts in the NEWS-RECORD, because they know it to be

For Official Proposals

The One Dominant Paper

OFFICIAL PROPOSALS

Bids: July 1.

Grading and Draining Road

Lewisburg, W. Va.

Until noon, July 1st, sealed bids will be received by the County Court of Greenbrier County, West Virginia, for grading and draining proposed road leading from Ronceverte, west to the Fort Spring District line, or so much thereof as funds available will permit. $70,000 has been appropriated.

The bulk of this work is on a new location with which traffic will not interfere.

Plans and specifications will be supplied to applicants sufficiently interested to look over the work.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER, County Engineer.

Bids: July 2.

School Equipment

Fargo, N. D.

Sealed proposals will be received by the Board of Education, Fargo, N. D., for the equipment of the New Combination School, covering the following lettings:

1. Cabinet work.
2. Miscellaneous furniture.
3. Metal book stacks.
4. Metal locks.
5. Gymnasium equipment.
6. Kitchen equipment.
7. Pupils' desks and opera chairs.
8. Cork carpet.
9. Art drawing tables.
10. Window shades.
11. Printing equipment.
12. Wood working equipment.
13. Ash hoist.
14. Machine shop equipment.
15. Traverse curtains.
16. Stage scenery.
17. Clocks, bells, telephones and fire alarm system.
18. Electric light fixtures.

Proposals to be delivered to E. G. Guthrie, Secretary, Board of Education, Fargo, N. D., on or before 3 P.M., July 2, 1919.

Plans and specifications may be secured by application to Secretary Guthrie or Wm. B. Ittner, Architect, Board of Education Bldg., St. Louis, Mo.

Bids: June 25.

Concrete Pavement

Greenwich, Conn.

Sealed proposals, for about 15,000 square yards of concrete pavement, will be received by the Highway Commission of the Town of Greenwich, Conn., at the office of the Superintendent of Highways in the Town Hall, until 3 P.M., on Wednesday, June 25, 1919.

Plans and specifications can be seen and blank forms of proposal obtained at the office of the Engineer, Room 5, No. 96 Greenwich Avenue, Greenwich, Conn. The right is reserved to reject all bids.

LUKE VINCENT LOCKWOOD,
Chairman.
WILLIAM F. DECKER
ROBERT L. CHAMBERLAIN
F. HARRIS NICHOLS
JOHN MAHER
NATHANIEL A. KNAPP
Highway Commission.

Bids: July 1.

Pumping Plants, Transformers, Re-formers, Etc.

Stockholm, Sweden.

For account of the City Water Works of Stockholm, Sweden, the following estimates are asked for:

A high pressure pumping plant:
  Capacity, 600 liters per second, with direct coupled steam turbine.
A high pressure pumping plant:
  Capacity, 600 liters per second, with direct coupled electric motor.
A filter pumping plant:
  Capacity, 400 liters per second, with direct coupled electric motor.
A speedy firing steam boiler.
A transformer plant.
A re-former.
Electric wires, conduits for water and steam, etc.

Estimates to be furnished at the Office of Stockholms Vattenledningsverk, Torsgatan 30, Stockholm, on Tuesday, July 1, 1919, at 2 P.M., at the latest.

Particulars necessary for delivering estimates will be given at the address aforesaid, where necessary drawings, programs and formula for contracts also are handed out, against the deposit Sw. Krs. 25, which sum will be refunded on delivery of estimate and restitution of documents in a sound condition.

Bids: June 23.

Auto Sprinkler and Oiler

Woonsocket, R. I.

Sealed proposals will be received by tl Aldermanic Committee on Streets a Bridges of the City of Woonsocket, R. at the Aldermen's Chambers, City H: Woonsocket, R. I., until 8.15 Monday, J 23, 1919, at which time and place posals will be publicly opened and r Said Committee will be in session at 8 on said date for the purpose of recei proposals for the following.

For a Combination Auto Sprinkler Oiler. Bidders to furnish their ow spe fications. Certified check for $1 .00 mus accompany proposal, as suret that if proposal is accepted a co t will be entered into.

The right is hereb reserved to reject any or all bids as the interest of the City may appear.

Aldermanic Committee on Streets and Bridges.

ADRIAN H. SYLVESTRE,
Chairman.
JAMES F. CARROLL
ANTHONY BELANGER
FRANK H. MILLS,
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POSITIONS VACANT

C. E. DRAFTSMAN wanted, highway and drainage a specialty. Furnish reference and sample of lettering. Good opportunity for right man. State salary expected. Jno. M. Harbert, Eng. Co., Indianola, Miss.

COMPETENT structural engineer wanted for position of contracting engineer with old established company doing principally industrial building and railroad work. Must be a man of good address who has had some experience in estimating and selling. Location Middle West. Give full details of experience, references and salary expected. Address P-615, Eng. News-Record, Chicago.

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DRAFTSMEN wanted for the Panama Canal—One electrical draftsman, experienced in underground power distribution and building illumination, $168 month to $179 month. Three hull and marine machinery draftsmen, $168 to $231 month. One draftsman capable of handling municipal engineering work, $189 month. Must be thoroughly experienced in special lines above indicated, American citizens, under 50 years of age, in good health. Free steamship transportation from New York or New Orleans, salary beginning date of sailing. Write Chief of Office, The Panama Canal, Washington, D. C.

CONCRETE DESIGNER wanted by reinforced concrete builders in Rocky Mountains. The applicant must have a solid experience as a concrete designer, and will have to work out independently intricate problems, such as rigid frames, long span arches, etc. First-class opportunity for a good man. P-690, San Francisco, Calif.

DRAFTSMAN wanted; strictly and draftsman experie house layouts time. conveyin quantities are as follows:

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4	miles Fence Moving.
35,000	cu.yds. Earth Excavation.
1.5	miles grading machine work.
216	cu.yds. Class A concrete.
119	" " B concrete.
504	lin.ft. Concrete or Corr. Iron Pipe, 18 inch.
622	lin.ft. Concrete or Corr. Iron Pipe, 24 inch.
3	40 ft. Steel Truss spans erected.
1	60 ft. " " " "

it to be- anufactur of rolling steel rs. State experience, salary and free. Permanent position to right man. P-568, Eng. News-Record.

ENGINEERS wanted; one transitman and one draftsman, with some experience in highway work. Permanent employment if services satisfactory. P-216, Eng. News-Record, Chicago.

ESTIMATOR wanted for structural and miscellaneous iron and one for plate work; must be qualified to take items from plans. Write, giving age, experienge in detail, references and salary expected. Mosher Mfg. Co., Dallas, Tex.

Experienced Draftsmen Wanted

for right-of-way and track maps in connection with Federal Valuation and maintenance of way. State age, nationality, experience and salary expected. Submit sample of work.

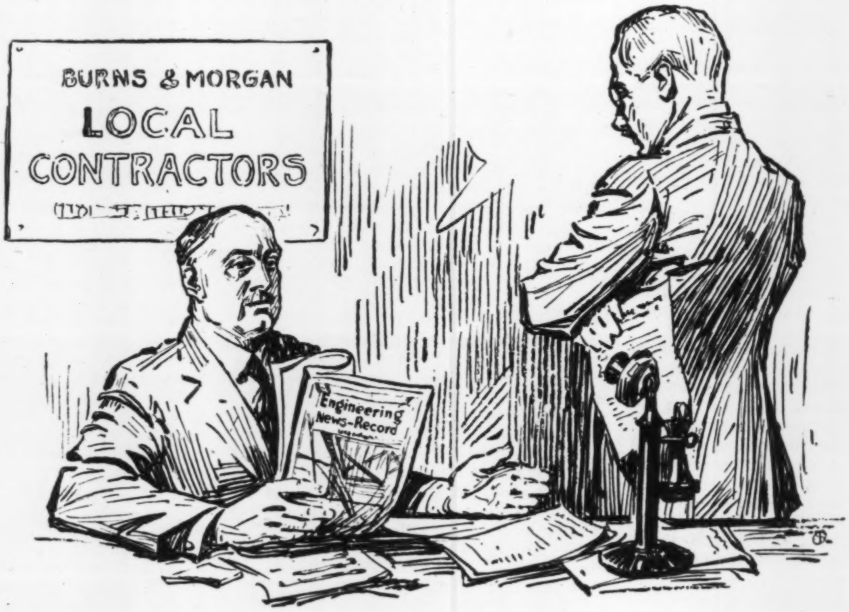
H. R. CARPENTER
Chief Engineer
Missouri Pacific Railroad, St. Louis, Mo.

MEN WANTED

Large company located in Middle West, engineering and constructing industrial buildings needs men who can produce results in following capacities:

FIELD SUPERINTENDENTS, FIELD ENGINEERS, ESTIMATORS, DRAFTSMEN, TIMEKEEPERS AND ACCOUNTANTS, MASON, CARPENTER AND CONCRETE FOREMEN. ***Give Complete Experience, Salary Expected and Notice Required to Report.***

P 717 Eng. News-Record, 1570 Old Colony Bldg., Chicago, Ill.



We'll have to figure closer, Jim—they're advertising that contract in the

Engineering News-Record

Local bidders figure closer when they find that the letting of a contract is being advertised in the ENGINEERING NEWS-RECORD. Through its 33,000 circulation, ENGINEERING NEWS-RECORD reaches the worthwhile contractors all over the country. Numberless municipalities have saved thousands of dollars on contracts through very small investments in NEWS-RECORD Official Proposal advertising. The publication of such advertising is an official notice that bids are wanted from both local and OTHER contractors. Contractors who bid on work outside of their own city look for such contracts in the NEWS-RECORD, because they know it to be

For Official Proposals

The One Dominant Paper

OFFICIAL PROPOSALS

Bids: July 1.

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H. R. CARPENTER
Chief Engineer
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P 717 Eng. News-Record, 1570 Old Colony Bldg., Chicago, Ill.

POSITIONS VACANT

ESTIMATOR and draftsman on reinforced concrete work wanted in steel warehouse in Philadelphia. Apply in writing, stating experience and salary wanted. Lewis N. Lukens, 2215 Race St., Philadelphia.

FOREMAN to erect structural steel work. Only those with experience should apply. State age, references and salary. P-720, Eng. News-Record.

HEATING, ventilating and electrical draftsmen wanted by a consulting engineer in New York City. State in full experience and salary expected. P-689, Eng. News-Record.

EXPERIENCED designer and estimator wanted of all classes of railway freight cars. Give full details in first letter as to age, education, references, salary expected and earliest date available. P-712, Eng. News-Record, Philadelphia.

EXPERIENCED foreman wanted for concrete road work. Must be A-1 man. [illegible] experience and salary expected. [illegible] Pipe & Construction Co., [illegible]

[illegible] ted on tank [illegible]

[illegible] Newport News, Virginia.

FIRST-CLASS, high-grade structural steel designer wanted of not less than ten years' experience, and preferably one familiar with blast furnace or steel plant work. Permanent position. State full details regarding experience, salary wanted and date available. P-575, Eng. News-Record, Leader-News Bldg., Cleveland.

LEVEL man and transitmen wanted on highway work; state age, experience, education, nationality and salary desired; no replies to rejected applicants. Morgan Engineering Co., 622 Goodwyn Institute, Memphis, Tenn.

ONE structural steel and highway bridge detailer wanted and one first-class checker and designer on the above class of work. Location, Ohio. P-706, Eng. News-Record, Leader-News Bldg., Cleveland.

RAILROAD draftsman, technically educated preferred, for buildings, track and yard layouts, general railroad drafting and estimating. Give details of education, experience, age. Salary, $150 to $180. P-707, Eng. News-Record, Philadelphia.

EMPLOYERS

Send us your inquiries for men of technical training and experience. We are obtaining employment for soldiers, sailors and marines released from the service.

Re-Employment Bureau of New York City for Soldiers, Sailors and Marines, 505 Pearl Street, north of Municipal Building, Professional Section, Worth 9250.

Chief Engineer

thoroughly familiar with the Design and Manufacture of Dredges, Excavators, Derricks, Cranes, and similar work, wanted for a large Eastern company. Salary $5000 to $7000 per year. Write fully, stating experience in detail.

We have over 200 other *very good positions open for*

Engineers, Designers and Draftsmen

H. H. HARRISON & CO.
Confidential Employment Service
Association Building, Chicago, Ill.

POSITIONS VACANT

RAILROAD draftsman, expert on track layouts, yard design and estimating required. Give details as to experience, age, etc. Salary, $180 per month. P-595, Eng. News-Record, Leader-News Bldg., Cleveland.

STRUCTURAL engineer, capable of taking entire charge of structural drafting room in Central West. An exceptional opportunity for the right man. P-613, Eng. News-Record, Philadelphia.

STRUCTURAL steel detailers wanted; reply by mail, stating age, nationality, experience and salary expected. The George A. Just Company, Long Island City.

STRUCTURAL steel draftsmen wanted, capable of making designs and calculations for railroad structures. Applicants must state in full technical college education, experience, age, nationality, salary expected and when available. Address P-721, Eng. News-Record, Philadelphia.

TWO good engineers wanted at once with experience in municipal work and highway work; 25 to 30 years of age; preferably unmarried. Address P-705, Eng. News-Record, Philadelphia.

POSITIONS VACANT

SUPERINTENDENTS wanted for country elevator construction and reinforced concrete. Men familiar with draw-form work and who can handle job from start to finish. Apply, giving references and salary expected, to Simon Construction Company, Columbia, Mo.

TECHNICAL graduate draftsman wanted; experience not necessary, but good mathematical ability with speed and accuracy and sterling qualities of manhood essential. Permanent and every opportunity for advancement. Give complete information and references. Canadian preferred. Canadian Des Moines Steel Co., Ltd., Chatham, Ontario.

TRACERS, draftsmen and computers on highway and reclamation work. Men with highway experience preferred. State age, experience, education, nationality, and salary desired, in the order named. Give two references. Typewrite applications where possible. Tracers must submit sample of work showing lettering. No replies to rejected applicants. Morgan Engineering Company, 622 Goodwyn Institute, Memphis, Tennessee.

DO YOU LIVE IN

Carson City, Nev.
Erie, Pa.
El Paso, Tex.
Galveston, Tex.
Halifax, N. S.
Houston, Tex.
Jackson, Miss.
Keokuk, Ia.
Miami, Fla.
Montgomery, Ala.
Pierre, So. Dak.
Sacramento, Calif.
San Francisco, Calif.
Santa Fe, N. M.
Winnipeg, Man.
Worcester, Mass.

If so, you can *make some money* by devoting an hour or so *during business hours,* to calling on engineers, contractors, etc., gathering construction reports for the construction news section of Engineering News-Record.

Write, telling all about your present work and how much time you have available, to

L. V. FLETCHER, Engineering News-Record
10th Ave. at 36th St., New York

STUDY BY MAIL

Reinforced Concrete Engineering
Structural Steel Designing
Structural Drafting

Are you able to design and estimate the cost of any and all types of structures in Reinforced Concrete, Steel or Wood? And are your designs safe, economical and up to the minute? If not, WHY NOT?

Special courses of HOME STUDY have been arranged by well known engineer with 30 years' experience in this country and abroad; they are meeting a long felt want.

Men with a High School education are as qualified to take up these courses of work as are technical graduates. Ideal work for the man who wants to "brush up" after being away.

These are courses in experience. You learn to do the work by *actually doing it.* A chance for the ambitious man to get ahead.

Descriptive literature sent free upon request.
Write for it today.

M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: July 15.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS
Albany, June 16th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until 12 o'clock noon of Tuesday, July 15, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 43

For constructing a Barge Canal terminal and a frame freighthouse at Flushing, Borough of Queens, New York City.

Contract plans, sheets 1 to 10, inclusive.

—2—

TERMINAL CONTRACT NO. 112.

For furnishing, delivering and testing industrial freight-handling trailers and stevedore freight-handling trucks for Barge Canal terminals in New York City:

Contract plans, sheets 1 and 2.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at office of State Engineer, Hall of Records, New York City.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

E. S. WALSH,
Superintendent of Public Works.

Special price for Official Proposals, $3.60 an inch — Copy for Official Proposals can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

U. S. ENGINEER OFFICE, 725 Central Bldg., Los Angeles, Cal. Sealed proposals for constructing silt diversion works near Los Angeles and Long Beach Harbors, California, will be received here until 11 A.M., July 18, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 2, Cleveland County, Arkansas, at the office of the State Highway Dept., Little Rock, Ark., up to 4 o'clock P.M., on June 26th, 1919, for the construction of 10½ miles of road. Bids are asked on Clearing and Grubbing, Culverts, Bridges and Grading, only, at this time.

The approximate quantities are as follows:

28	acres Clearing and Grubbing.
4	miles Fence Moving.
35,000	cu.yds. Earth Excavation.
1.5	miles grading machine work.
216	cu.yds. Class A concrete.
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3	40 ft. Steel Truss spans erected.
1	60 ft. " " " "
1	80 ft. " " " "
260	lin.ft. Wooden Pile Bridges.

Separate bids may be submitted for any one or all of the following items:

Concrete or Corrugated Iron Pipe, Concrete in culverts and bridge abutments, Steel bridges erected, Wooden bridges erected.

Plans and specifications are on file with the State Highway Dept., Little Rock, Ark., and copies of same, together with proposal forms may be obtained from the District engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00, of which amount $8 will be refunded upon their erturn.

A certified check to the amount of 5% of the amount bid msut accompany each proposal, check to be made to the order of the President of the Board of Commissioners of said district.

Successful bidders will be required to furnish a construction bond to the amount of 25% of their contract price.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 2,
Cleveland County, Arkansas.
By M. F. STANFIELD, President.

Bids: July 1.

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The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

Bids: July 9.

Paving

Halifax, N. S.

Sealed tenders, addressed to His Worship the Mayor and endorsed "Tender for Paving" will be received at the office of the Clerk of Works, City Hall, Halifax, Nova Scotia, until 10 o'clock a.m., on Wednesday, July 9th, 1919, for paving certain streets in the City of Halifax.

The approximate quantities are:

23,000 sq.yds. of granite block pavement on concrete base; 133,000 sq.yds. of bituminous pavement on concrete base; 30,000 sq. yds. of bituminous pavement on macadam base; 33,000 lineal feet of concrete curb and gutter.

Each tender must be accompanied by a certified cheque payable in Halifax to the City Treasurer for the amount set forth in the forms of tender for each street, which cheque will be forfeited to the City if the bidder fails to execute the contract if awarded to him, within five days of the notice of such award.

The successful bidder will be required to furnish a bond to the amount of 25% of the amount of the contract as estimated by the City Engineer for the faithful performance of the contract.

Plans and specifications may be seen and forms of tender and all other information obtained at the City Engineer's office, City Hall, Halifax.

The City reserves the right to reject any or all tenders or to accept any tender which it deems best.

F. W. W. DOANE,
City Engineer.

Halifax, Nova Scotia.
June 18th, 1919.

Bids: July 7.

Concrete Bridge Construction

Elmira, N. Y.

Sealed proposals for the construction of a concrete bridge approximately 830 feet long and 30 feet high, consisting of eight arches, over the Chemung River at Main Street in the City of Elmira, Chemung County, New York, will be received by the Board of Public Works of the City of Elmira, N. Y., at the office of the City Clerk in the City Hall, until 11:00 o'clock A.M., Monday, July 7, 1919, and publicly opened at that time.

Bids must be made upon proposal blanks attached to the specifications, and must be accompanied by a Certified Check in a sum equal to at least five per cent. (5%) of the amount of the bid and made payable, without reservations, to the order of the Mayor of the City of Elmira, N. Y.

Plans and specifications may be seen at the office of the City Engineer in the City Hall, Elmira, N. Y. Copies of the plans and specifications may be had by making a deposit of Ten Dollars ($10.00), which deposit will be returned when plans are returned in good condition on or before the date of the letting.

The right is reserved to reject any or all bids. LOUIS C. ANDREW,
of the City of Elmira, N. Y.

STRUCTURAL STEEL, FORGINGS, CASTINGS, ETC.—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), June 23, 1919, and then opened, for furnishing and delivering structural steel, forgings, castings, etc. for lock gates at Locks Nos. 1 and 4, Little Kanawha River. Information on application.

Bids: July 8.

Road Construction

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Tuesday, July 8, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph County, to be let in sections. Said work having been heretofre let to Contract to the R. M. Hudson Paving and Construction Co. and not completed by it. And bids having been received therefore on June 2, 1919, and rejected. A certified check in the sum of $500 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

THADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for concrete, macadam, tarvia, warrenite and asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: July 8.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., July 8, 1919, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of the following pavements: 45,051 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick on a Concrete Foundation or Reinforced Concrete in Bradford County; 14,883 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Bucks County; 41,673 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Butler County; 12,355 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 30,995 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Clearfield County; 2903 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Clinton County; 24,900 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Delaware County; 30,197 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Fayette County; 46,297 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Lehigh County; 22,705 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Luzerne County; 80,363 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 30,335 linear feet of Reinforced Concrete in Susquehanna County; 17,412 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick or Reinforced Concrete in Sullivan County; 28,831 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete in Tioga County; 32,047 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Westmoreland County; 71,063 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lackawanna and Wyoming Counties, and 32,744 linear feet of Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER
State Highway Commissioner

Bids: July 1

Jail Construction, Etc.

Toms River, N. J.

For the erection and completion of alterations and additions to jail and new wardens' house at Toms River, Ocean County, N. J. will be received on July 1st, 1919, at 12 o'clock noon and then publicly opened, each "bid' to be accompanied with a certified check or bid bond for $1000 to guarantee faithful execution of contract. All "bids" to be addressed to E. R. Yoder, chairman of building committee of the Ocean County Board of Freeholders. Plans are on file at the office of Thomas Stephen, architect, Room 304, Temple Building, Camden, N. J.

Rights reserved to reject any or all "bids."

Bids: June 23.

Well for Water Supply

Hoffman Island, N. Y.

Sealed proposals for new well for water supply, Quarantine Station, Hoffman Island, N. Y., will be received by Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y., until 12 o clock noon, on Monday, June 23, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the state architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of specification No. 3269. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of Dr. L. E. Cofer, Health Officer, Port of New York, Rosebank, Staten Island, N. Y.; at the New York office of the Department of Architecture, Room 618, Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated June 9, 1919.

Bids: July 2.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 1, Section No. 3 (Robbinsville to Windsor), Mercer County, concrete surface, estimated 26,843 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 2 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10), to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER,
Chief Clerk.

Bids: June 28.

Highway Construction

ERIE COUNTY, PENNSYLVANIA

North East, Pa.

Sealed proposals will be received by the North East Township Road Supervisors, at their office at North East, Pa., until 10 A.M., June 28, 1919, when bids will be opened and scheduled, and contracts awarded as soon thereafter as possible, for the construction of approximately 8000 ft. of reinforced concrete pavement, in North East Township, on the road leading from North East Boro. to Findley Lake. Construction to be according to Pennsylvania State specifications. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application at the office of Hill & Hill, Engineers, Marine Bank Bldg., Erie, Pa., or at their North East, (Pa.) office. They also can be seen at either of the above offices. The right is reserved to reject any or all bids and to waive defects in forms.

NORTH EAST TOWNSHIP,
Road Supervisors.

Bids: June 25.

Road Work

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS
DIVISION OF HIGHWAYS

Springfield, Ill.

Sealed proposals will be received in the office of the Department of Public Works and Buildings, Division of Highways, Springfield, Illinois, until 10 o'clock A.M., June 25, 1919, for the road work designated below. All bids shall be on regular forms furnished by the Department.

Route	County	Sec.	Width, Feet	Approximate Length, Feet
Springfield, East St. Louis	Sangamon	G	16 and 18	26,205
Springfield, East St. Louis	Sangamon	H	16 and 18	29,982
Springfield, East St. Louis	Sangamon	C	16	30,011
Springfield, East St. Louis	Sangamon	P-15d	16	24,508
Springfield, East St. Louis	Macoupin	D	16	34,940
Springfield, East St. Louis	Macoupin	L-15d	16	9,525
Springfield, East St. Louis	Macoupin	E	16	33,040
Springfield, East St. Louis	Macoupin	F	16	29,109
Henry-Morris	Marshall	A1	16	22,714 8
Henry-Morris	Marshall	A2	16	12,598 7

Plans for all the work may be examined in the office of the Division of Highways, Springfield, Illinois. Plans for the sections in the counties of Sangamon and Macoupin may be examined in the office of Fred Tarrant, District Engineer, 506½ East Monroe Street, Springfield, Illinois. Plans for the section in Marshall County may be examined in the office of A. H. Hunter, District Engineer, 302 Apollo Theatre Bldg., Peoria, Illinois.

Except as noted below, alternative bids will be received for the following types of construction: Portland cement concrete; monolithic brick (4 inch brick); monolithic brick (3 inch brick); bituminous concrete with binder course (Specifications C1, C2, C3 or CT); bituminous concrete without binder course (Specifications C1, C2, C3 or CT).

Cement will be furnished for all sections by the State or the County.

Contractor's reconnaissance profiles and blue prints showing the locations of the work, railroad sidings and material information may be obtained by prospective bidders in the office of the District Engineer having the plans.

By order of The Department of Public Works and Buildings.

FRANK I. BENNETT,
Director.

S. E. BRADT,
Supt. of Highways.
CLIFFORD OLDER,
Chief Highway Engineer.

Bids: July 2.

Boilers and Stokers

Lorain, Ohio.

Sealed proposals will be received by the Board of Education, Lorain, Ohio, until 12 o'clock noon, July 2, 1919, for the installation of water tube boilers and stokers and erection of a radial brick chimney at the High School Boiler House as per plans and specifications prepared by the Watson Engineering Co. of Cleveland, Ohio.

Plans and specifications are on file at the office of the Clerk of the Board of Education, Lorain, Ohio, and at the office of the Watson Engineering Co., 1101 Hippodrome Bldg., Cleveland, Ohio.

Bidders shall be required to state when they will begin and finish the work after the contract shall have been entered into.

Each bid must contain the name of every person interested in the same and must be accompanied by a certified check, payable to the Board of Education of Lorain, Ohio, in the sum of $500 as a guarantee, that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

Proposals must be sealed up, addressed to the Clerk and indorsed on the outside, plainly showing the items bid upon and the name of bidder.

The Board reserves the right to reject any, part of any or all bids or proposals.

A satisfactory bond of not less than fifty (50) per cent. of the contract price will be required on all contracts.

By order of the Board of Education, Lorain, Ohio.

E. BRUELL,
Clerk.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Room 424 Federal Bldg., Milwaukee, Wis., 2 o'clock p.m., June 23, 1919, for 4 skeleton 31 ft. steel towers, each with attached steel tank house. Proposal No. 6628. Information upon application to the above Supt.

Bids: July 2.

Bridge Construction

Pocahontas, Iowa

Bids will be received until 1 P.M., July 2nd, 1919, at office of County Auditor, by Board of Supervisors, Pocahontas County, for the construction of bridges as follows:

34 x 25 ft. concrete deck girder, 17 ft. concrete abutments
24 x 20 ft. skew concrete slab, 12 ft. concrete abutments
24 x 30 ft. skew concrete slab, 13 ft. concrete abutments
16 x 20 ft. concrete slab, 14 ft. concrete abutments
32 x 25 ft. I-beam with concrete floor and handrails, 14 ft. concrete abutments

Also the following light steel pony trusses to be moved and placed on pile abutments: One 55 x 16 ft.; two 45 x 16 ft.; one 40 x 16 ft.; one 35 x 16 ft.

Plans for above may be obtained from county engineer by deposit of $10, to be refunded on return of same.

Bids: June 24.

Concrete Bridge Construction

Menasha, Wisconsin.

Sealed proposals will be received by the Common Council of the city of Menasha, Wisconsin, until 7 P.M., on June 24th, 1919, for the construction of a reinforced concrete arch bridge over Fox River at Washington Street. The proposed bridge consists of seven arches, the total length being 430 ft. and the width 59 feet.

Plans, specifications, form of contract and bond will be sent to all prospective bidders making application to Parsons & Obert, Consulting Engineers, 627 M. & M. Bank Building, Milwaukee, Wisconsin, enclosing $2.00 to cover expense of blue prints.

Plans are open for inspection at above office and are on file in the office of the City Clerk, Menasha, Wisconsin.

Published by authority of the Common Council of the city of Menasha, Wisconsin.

S. S. LITTLE, City Clerk.

OFFICIAL PROPOSALS

Bids: July 1.

Construction, Heating, Etc.

Middletown, N. Y.

Sealed proposals for construction, heating, sanitary and electric work, new building for chronic patients, Middletown State Homeopathic hospital, Middletown, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3246, 3247, 3248 and 3249. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Middletown State Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Caiptol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Dated: May 29, 1919.

Bids: July 9.

Classification and Appraisal of Lands

Shelby, Montana.

Sealed bids are called for by the Board of County Commissioner, Toole County, Montana, for the classification and appraisal of all lands in Toole County, comprising approximately fifty-four and one-half townships.

Specifications for said work can be had upon application to the County Clerk, Shelby, Montana. Bids to be in by 2 o'clock P.M., July 9, 1919, at which time they will be publicly opened.

The Board reserves the right to reject any or all bids.

By Order of the Board of County Commissioners Toole County, Montana.

H. E. MOODY, Clerk.

Bids: July 1.

Macadam Construction

Lewisburg, W. Va.

Until noon, July 1st, 1919, sealed bids will be received by the County Court of Greenbrier County for the construction of 2 miles of Penetration Macadam pavement 16 feet wide, beginning at the end of the present pavement, three miles north of the town of Lewisburg and extending along the Marlins Bottom Turnpike. Grading has been done and local limestone will be used, haul 1 mile. For specifications and information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

OFFICIAL PROPOSALS

Bids: June 23.

Waterworks Improvements

Lusk, Wyoming, June 3, 1919.

Sealed bids for improvements and extensions to the Municipal Water System will be received by the Town Council of the Town of Lusk, Wyoming, up until 8 o'clock P.M., June 23, 1919, and then and there publicly opened and read.

The plan embraces the furnishing and installing of approximately 12,850 ft. of four inch, 1700 ft. of six inch, 3300 ft. of eight inch, 1330 ft. of ten inch and 4950 ft. of twelve inch cast iron pipe Class "B" American Waterworks Standard, according to plans and specifications on file in the offices, or the Town Engineer. Of the twelve inch pipe, 1750 ft. may be replaced by fourteen inch.

Hydrants and valves will be furnished by the Town, separate bids on which will be received at the same time as the foregoing. Forty-five fire hydrants and sixty valves, four to fourteen inch, with valve boxes, American Waterworks Standards will be required.

Bids for the principal work must be accompanied by certified check for five thousand dollars ($5000), made payable to the Town Treasurer, without recourse. Bids for hydrants and valves must be accompanied by certified check for at least ten per cent. of the gross bid.

Plans, specifications, proposal forms, form of contract and form of bond can be procured from R. F. Gray, Town Engineer, upon deposit of ten dollars ($10.00) which will be refunded upon their return in good condition not later than the day after opening of bids.

The Town Council reserves the right to reject any and all bids, to waive irregularities and to award the contract as may be deemed best for the interests of the Town.

GEORGE H. HOWES,
Mayor.
D. E. GODDARD,
Clerk.
R. F. GRAY,
Engineer.

Bids: July 7.

Street Repairing

Woodstown, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council for the repair of streets in the Borough of Woodstown, with a seal coat surface upon a repaired bituminous concrete foundation; estimated amount of surface pavement required is 27,475 square yards; at Council Chamber, Woodstown, N. J., on Monday, July 7th, 1919, at 7.30 P.M.

Drawings, specifications and further information in regard to bids may be obtained of Keasbey & Sparks, Engineers, Mecum Bldg., Salem, N. J.

WALTER SYLVESTER, Clerk.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, June 27, 1919, and then opened, for dredging in Pawtucket River, R. I. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y. Sealed proposals will be received here until 12 M., June 23, 1919, and then opened for dredging in Hackensack River, N. J. Information on application.

OFFICIAL PROPOSALS

Bids: July 7.

Bridge Construction

McAlester, Okla.

Notice is hereby given that sealed proposals for the construction of Highway Improvement in Pittsburg County, Oklahoma, will be received by the County Commissioners of Pittsburgh County, in the office of the County Clerk of said County, at McAlester, Oklahoma, until two o'clock P.M., Monday, July 7th, 1919. Said bids will then be publicly opened.

Description of work to be done:

To construct a steel Highway Bridge across Gaines Creek, approximately four (4) miles northeast of Canadian, Oklahoma, of approximately 354 feet in total length, consisting of three (3) spans of approximately 118 feet in length, and the necessary abutments and piers therefor, width of roadway 18 feet.

Detailed plans, specifications, estimates and form of proposal sheet may be seen for examination at the office of the County Engineer or the County Clerk, in McAlester, Pittsburg County, Oklahoma, or at the office of the State Engineer, in Oklahoma City, Oklahoma, or may be obtained by depositiing $5.00 with the County Engineer at McAlester. Such deposits will be returned only upon the return of the plans in good condition within two weeks after the letting.

A certified check for $1000.00 drawn upon some bank in the State of Oklahoma, and made payable to the County of Pittsburg, State of Oklahoma, must accompany each proposal. The right is reserved to reject any and all bids.

Proposals shall be submitted in sealed envelopes and marked "Bids for the Construction of Gaines Creek Bridge near Canadian, Oklahoma."

Proposals may be sent by mail, and when sent by mail shall be enclosed in an additional sealed envelope and marked as indicated above. All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the County Commissioners and will not be returned to the bidders.

W. J. KINDRICK, County Clerk.

Bids: July 1.

Street Improvement

HACKENSACK AVENUE IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Hackensack Avenue in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER.
Village Clerk.

Date June 12, 1919.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

Bids: June 25.

Sewer Construction

Lima, Ohio.

Sealed proposals for the construction of Collett Street Relief Sewer, Contract No. 1, will be received at the office of the Director of Public Service, City Hall, Lima, Ohio, until 12 o'clock noon, Central Standard Time (1 o'clock of so-called "Daylight Saving" Time), of the 25th day of June, 1919, and at that time and place will be publicly opened and read. The City of Lima reserves 30 days thereafter in which to act on the bids.

Alternate bids will be received for Monolithic Concrete, Segment Block or Reinforced Concrete Pipe as set forth on the blank form of proposal furnished by the City of Lima, Ohio. The total length of the sewers under this contract is about 16,430 ft., consisting of the following sizes: 84 in. circular; 78 in. by 127½ in. semicircular; 78 in. circular; 66 in. circular; 54 in. circular; 48 in. circular and 42 in. circular.

In addition there is an outlet abutment at the Ottawa River, an overflow chamber, together with special junctions at various points along the line of the proposed sewer.

The work to be done under this contract must be completed in accordance with the plans and specifications, not later than 30 months after the date of the award of the contract.

Copies of the plans, form of proposal, contract, bond and specifications may be inspected at any of the following offices:

Director of Public Service, City Hall, Lima, Ohio.

Fuller & McClintock, 170 Broadway, New York City.

Wm. G. Clark, 1047 Spitzer Building, Toledo, Ohio.

Copies of the plans and specifications with forms of proposal, contract and bond may be obtained at the office of the Director of Public Service, City Building, Lima, Ohio. A charge of seven ($7) dollars will be made for each set of plans and specifications. No charge will be made for the proposal bond.

Each proposal must be accompanied by a certified check upon a National Bank or Trust Company doing business in the State of Ohio, U. S. Government bonds or cash in the sum of seventeen thousand ($17,000) dollars, made payable to the City of Lima, Ohio.

The bidder to whom the contract is awarded will be required to furnish a surety company bond in the sum of 50% of his bid.

The City of Lima, Ohio, reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which he deems most favorable to the interest of the City of Lima, Ohio.

A. L. METHEANY,
Director of Public Service.
VAUGHN C. MILLER,
City Engineer.

OFFICE OF THE COMMISSIONERS, D. C.—Sealed proposals will be received at this office, Room 511, District Building, until 2 o'clock P.M., on June 23, 1919, for the construction of the Luzon Ave. Trunk Sewer, District of Columbia. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C LOUIS BROWNLOW, W. GWYNN GARDINER, CHARLES W. KUTZ, Commissioners.

Bids: June 26.

24 Inch Out-Fall Sewer

Greenwich, Conn.

Pursuant to a resolution adopted June 4, 1919, the Joint Sewerage Commission of the Borough of Greenwich and the Town of Greenwich, Connecticut, will receive at its meeting to be held at the Town Hall, Greenwich, Connecticut, on Thursday evening, June 26, 1919, at eight (8) o'clock P.M., sealed proposals for furnishing all materials and doing all work required to complete the construction of a new 24 in. Out-Fall Sewer from the junction of the east side and west side trunk sewers to the Joint Sewerage Disposal Plant upon Grass Island for the Borough of Greenwich, and Sewer District No. 6, of the Town of Greenwich, Connecticut, including the necessary piping, piling, etc.

Plans may be seen and specifications and forms of proposal obtained at the office of the Joint Sewerage Commissioners, Room No. 2, Town Building, Greenwich, Connecticut, or at the Office of Mr. S. E. Minor, Civil Engineer, No. 96 Greenwich Avenue, Greenwich, Connecticut. Plans may be taken away upon the payment of ten ($10) dollars, the same to be refunded if plans are returned within fourteen (14) days in good condition.

Each bid must be accompanied by a certified check on a solvent bank for one thousand ($1000) dollars.

The said Joint Sewerage Commissioners reserve the right to reject any and all proposals and to waive any informality in the proposals received and to accept any proposal which it deems to be most favorable to the interest of the Borough and Town.

HARRY C. FROST, Chairman.
JOSEPH P. CROSBY, Warden.
ALBERT S. MEAD, Clerk.

Bids: July 8.

Highway Construction

LENOIR COUNTY

Kinston, North Carolina.

Sealed bids for 3282 Cubic Yards Excavation, 18,820 square yards Concrete sheet Asphalt or Warrenite Pavement, 4356 pounds Reinforcement Steel, 242 Cubic Yards Box Culvert Concrete, on the Central Highway, in Lenoir County, North Carolina, will be received by Harvey C. Hines, Secretary at Kinston, North Carolina, at 2:30 o'clock P.M., on the eighth da yof July, 1919, opened and read publicly.

No bid will be considered unless accompanied by certified check, as specified in "Instructions to Bidders," for an amount equal to at least five per cent. (5%) of the total amount of the bid.

A Corporate Surety Bond will be required for the faithful performance of the Contract, in a sum equal to one-half (½) the total amount of the bid.

Plans, Specifications, Forms of Contract, Proposal Blanks, and full information for bidders may be obtained at the office of the State Highway Commission, at Raleigh, North Carolina, upon the payment of five dollars.

The right is reserved to reject ayn or all proposals or to accept the proposal or proposals deemed best for the State or County.

By order of the Highway Commission of Lenoir County.

This the 12th day of June, 1919.

E. V. WEBB,
Chairman of Highway Commission
of Lenoir County.

HARVEY C. HINES,
Secretary.

Bids: June 23.

Street Paving

Coatesville, Penn.

Sealed proposals addressed to the City Clerk of the City of Coatesville, Penn., and endorsed, "Bids for Paving Streets," will be received by the City Council at the City Hall, Coatesville, Penn., up to eight o'clock P.M., on Monday, June 23, 1919, and there publicly opened and read.

The work to be done consists of approximately:

28,625	sq.yd. of bituminous pavement on a cement concrete base.
1,375	sq.yd. of bituminous pavement on existing base.
4,500	sq.yd. of vitrified brick pavement to be relaid.
4,300	sq.yd. of vitrified brick pavement or stone block pavement along tracks.
3,000	lin.ft. cement concrete curb.

Bids will be received on sheet asphalt, asphaltic concrete, Warrenite, Filbertine, Amiesite and Bito-slag.

Each proposal must be accompanied by a certified check in an amount equal to five (5) per cent. of the highest amount bid, made payable to the Treasurer of the City of Coatesville, Pa.

A surety bond in an amount equal to fifty (50) per cent. of the total amount of the contract will be required from the successful bidder.

Plans and specifications are on file in the office of the City Engineer at Coatesville and copies of the same may be obtained by application and by the deposit of five (5) dollars which deposit will be returned if plans are returned in good condition within ten days after the opening of bids.

The City Council reserves the right to reject any or all bids or to award the contract as may be deemed for the best interests of the City.

The contractor must comply with all the requirements of the Workmen's Compensation Act of the State of Pennsylvania.

WILLIAM S. G. COOK,
CHAS. A. NILES, City Clerk,
City Engineer.

Bids: July 1.

Street Improvement

POPLAR STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Poplar Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Dated June 12, 1919.

U. S. ENGINEER OFFICE, Pittsburgh, Pa.—Sealed proposals will be received at the U. S. Engineer Office, Pittsburgh, Pa., until 12 noon (Eastern time), July 7, 1919, and then opened, for constructing locks and fixed dams in the Ohio River, near Emsworth, Pa. Further information on application.

OFFICIAL PROPOSALS

Bids: June 26.

Highway Construction

Little Rock, Ark.

Sealed bids will be received by the Commissioners of Road Improvement District No. 1, Jefferson and Lincoln Counties, Arkansas, at the Office of the State Highway Department, Little Rock, Arkansas, up to 2 o'clock P.M., on June 26th, 1919, and there will be publicly opened and read, for the construction of 19 miles of gravel roads, 14 feet wide.

The approximate quantities are as follows:

47	acres Clearing & Grubbing
13	miles Fence Moving
85,600	cu.yds. earth excavation
1.45	miles Grading Machine Work (on old road)
696	lin.ft. 16" Reinforced concrete pipe, laid
168	lin.ft. 20" Reinforced concrete pipe, laid
392	lin.ft. 24" Reinforced concrete pipe, laid
72	lin.ft. 30" Reinforced concrete pipe, laid
1,025	cu.yds. Class A concrete in culverts
392	" " B " in abutments and headwalls
80,200	lbs. Steel reinforcing bars
3	80 ft. Steel Truss spans, erected
1,655	lin.ft. wooden pile bridges
40,250	cu.yds. gravel on which the haul is as follows:

6,450	cu.yds.	haul	0-1	mile
6,450	"	"	1-2	miles
6,450	"	"	2-3	"
6,450	"	"	3-4	"
7,010	"	"	4-5	"
4,040	"	"	5-6	"
2,150	"	"	6-7	"
2,150	"	"	7-8	"

Separate bids may be submitted for any one or all of the following items:

Concrete pipe, f.o.b. cars, Tamo or Furth, Ark.

Concrete in culverts, abutments and headwalls.

Steel trusses, erected.

Wooden bridges.

Gravel, f.o.b. cars, Tamo and Furth, Ark.

Plans and specifications are on file with the State Highway Department, Little Rock, Ark., and copies of same together with proposal forms can be obtained from the district engineers, Moreland & Bennett, Pine Bluff, Ark., on deposit of $10.00 of which $8.00 will be refunded on their return.

A certified check to the amount of 5% of the bid must accompany all proposals, check to be to the order of C. P. Clemmons, Sec'y of the district.

Successful bidders will be required to execute construction bond to the amount of 50% of their bids.

BOARD OF COMMISSIONERS,
Road Imp. Dist. No. 1,
Jefferson & Lincoln Counties, Ark.
By E. P. LADD, President
C. P. CLEMMONS, Sec'y.

U. S. ENGINEER OFFICE, Florence, Alabama.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened, for Air Compressors. Further information on application.

PROPOSAL FOR BULKHEAD—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for bulkhead at Southwest Pass, Mississippi River. Information on application.

OFFICIAL PROPOSALS

Bids: June 24.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT, HARRISBURG, PA.

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., June 24, 1919, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 1269 lin.ft. of reinforced concrete in Blair County; 10,870 lin.ft. of bituminous surface course on a concrete foundation and Hillside vitrified brick, and 9122 lin.ft. of bituminous surface course on a concrete foundation, in Columbia County; 12,725 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 24,765 lin.ft. of reinforced concrete in Dauphin County; 21,506 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete in Lancaster County; 31,548 lin.ft. of either one course reinforced concrete on a concrete foundation or vitrified brick in McKean County; and 9641 lin.ft. of either bituminous surface course on a concrete foundation or reinforced concrete, and 25,693 lin.ft. of reinforced concrete and Hillside vitrified brick in Northumberland County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They also can be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Lewis S. Sadler, State Highway Commissioner.

Bids: July 16.

Water Mains and Appurtenances

Decorah, Iowa.

Sealed proposals will be received by the Mayor and City Council of the City of Decorah, Iowa, at 7:30 P.M., July 16, 1919, at the office of the City Clerk, in the said City, for laying approximately 11,400 lin.ft. 4 in. water main, and making necessary connections, as to valves, T's, L's and fire hydrants; also connecting with old mains where they intersect, the contractor to furnish labor, lead and oakum; bids will also be received for relaying of approximately 600 ft. of 10 in. vitrified sewer pipe.

Specifications showing schedule of streets, together with blank forms for bidders can be obtained at the office of the City Clerk, City Hall, Decorah, Iowa.

All bids must be accompanied by a certified check for 5% of the amount bid.

The contractor must comply with all provisions of the Workmen's Compensation Act of Iowa.

The Council reserves the right to reject any or all bids and to award the work as may appear to be for the best interests of the city.

MARK D. WELLS,
City Clerk.

GATE-OPERATING MACHINERY.—U. S. Engineer Office, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., July 8, 1919, and then opened, for furnishing and delivering gate-operating machinery for Dams Nos. 33 and 39, Ohio River. Information on application.

OFFICIAL PROPOSALS

Bids: July 1

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, the 1st day of July, 1919, for the improvement of the following highways:

Albany—One highway: 3.93.
Herkimer—Two highways: 5.84 and 5.67.
Oneida—One highway: 0.45.
Putnam—One highway. 3.33.
Saratoga—Two highways: 9.06 and 1.52.
Suffolk—Two highways: 6.59 and 4.99.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

Cattaraugus—One highway: 6.98.
Cayuga—Two highways: 3.89 and 4.89.
Cortland—One highway: 6.07.
Erie—One highway: 6.03.
Franklin—One highway: 1.99.
Hamilton—One highway: 5.01.
Jefferson—One highway: 4.05.
Madison—One highway: 5.65.
Niagara—One highway: 8.00.
Schenectady—One highway: 5.62.
Wayne—One highway: 5.85.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

Rensselaer—One contract, reconstruction.
Ulster—One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved, completed or repaired are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
Commissioner.
ROYAL K. FULLER,
Secretary.

Bids: June 23.

Auto Sprinkler and Oiler

Woonsocket, R. I.

Sealed proposals will be received by the Aldermanic Committee on Streets and Bridges of the City of Woonsocket, R. I., at the Aldermen's Chambers, City Hall, Woonsocket, R. I., until 8.15 Monday, June 23, 1919, at which time and place proposals will be publicly opened and read. Said Committee will be in session at 8 P.M. on said date for the purpose of receiving proposals for the following.

For a Combination Auto Sprinkler and Oiler. Bidders to furnish their own specifications. Certified check for $100.00 must accompany proposal, as surety that if proposal is accepted a contract will be entered into.

The right is hereby reserved to reject any or all bids as the interest of the City may appear.

Aldermanic Committee on Streets and Bridges.

ADRIAN H. SYLVESTRE,
Chairman.
JAMES F. CARROLL
ANTHONY BELANGER
FRANK H. MILLS,
City Engineer.

OFFICIAL PROPOSALS

Bids: June 27.

Paving

Ilion, N. Y.

Sealed proposals for the construction of about 14,000 Square Yards of Pavement, including the necessary Curbing, Catch Basins, Tile, etc., will be received by the Board of Trustees, and the Board of Street Commissioners, at their rooms in the Village Hall on Union Street, Ilion, N. Y., until 4 p.m. Friday, June 27th, 1919. Plans may be seen and specifications obtained at the Office of J. D. Ringwood Village Engineer, in the Village Hall. Bids will be received of Brick, Bitulithic, or reinforced concrete; a certified check for $100,00 must accompany each bid. The Boards reserve the right to reject any or all bids.

EDWARD BEDFORD, President.
SANGER M. HUBBARD, Clerk.
Ilion, N. Y., June 12th, 1919.

Bids: July 2.

High School

Sterling, Illinois.

Sealed proposals will be received at the office of Carl E. Sheldon, attorney, Sterling, Illinois, for the construction of an addition to the Sterling Township High School. Estimated cost, $50,000.00 to $60,000.00. Plnas and specifications, office of Fred W. Honens, Sterling, Illinois. Certified check for 5% to accompany bid.

D. L. MILLER.
Clerk.

PROPOSAL FOR STONE.—U. S. Engineer Office, Customhouse, New Orleans, La. —Sealed proposals will be received here until 11 A.M., July 15, 1919, and then opened, for furnishing and delivering stone for Head of Passes, South Pass, and Southwest Pass, Mississippi River. Further information on application.

PROPOSAL FOR COAL—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 27, 1919, and then opened for furnishing and delivering coal for the U. S. Plant from date of receipt of notification of approval of contract to December 31, 1919. Further information on application.

PROPOSALS FOR PILES AND LUMBER—U. S. Engineer Office, Customhouse, New Orleans, La.—Sealed proposals will be received here until 11 A.M., June 25, 1919, and then opened for furnishing and delivering piles and lumber on the bank or wharves in Southwest Pass, South Pass, and Head of Passes, Mississippi River. Further information on application.

PROPOSALS FOR DREDGING—U. S. Engineer Office, Portland, Maine.—Sealed proposals will be received here until 2 P.M., June 24, 1919, and then opened, for dredging in Georges River (Thomaston Harbor) and Tenants Harbor, Maine. Further information on application.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

OFFICIAL PROPOSALS

Bids: June 23.

Paving

Geneva, N. Y.

Sealed proposals will be received by the Board of Public Works of the City of Geneva, N. Y., at its office in the City Hall, until 7:30 o'clock P.M., Monday, June 23, 1919, for paving High, West and Brook Streets. The work for which proposals are invited consists of the following approximate quantities:

5,400	cu.yd. of excavation.
8,750	lin.ft. of curb and gutter.
175	lin.ft. of header.
8,750	lin.ft. of 3 in. drain tile.
3,000	lin.ft. of vitrified pipe.
30	catch basins.
10,000	sq.yd. of brick, asphalt or concrete pavement.

Each proposal must be accompanied by a certified check for five (5%) per cent. of the amount of the proposal.

A surety bond in the sum of fifty (50%) per cent. of the amount of the contract will be required of the successful bidder.

Specifications and blank forms of proposals can be obtained upon application to the Board of Public Works. Plans may be seen at the office of the City Engineer.

The right is reserved to reject any or all bids.

H. K. SEYBOLT,
Superintendent.

Bids: July 9.

Highway Construction

THE STATE OF DELAWARE
Dover, Delaware.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock, P.M., July 9, 1919, and at that place and time publicly opened, for the construction of 8.27 miles of State Highway (cement concrete) in New Castle and Kent Counties, Delaware, involving the following approximate quantities:

CONTRACT NO. 15—0.42 MILES

21,500	cu.yd. grading
10	cu.yd. concrete masonry
300	pounds reinforcement
50	lin.ft. 15-in. reinforced concrete pipe
34	lin.ft. 30-in. reinforced concrete pipe
6	bounds
1,500	tons stone for macadam
600	sq.yd. penetration macadam

CONTRACT NO. 16—4.91 MILES

7.5	acres clearing and grubbing
56,000	cu.yd. grading
1,000	cu.yd. concrete masonry
32,000	pounds reinforcement
400	lin.ft. 15-in. reinforced concrete pipe
68	lin.ft. 18-in. reinforced concrete pipe
68	lin.ft. 24-in. reinforced concrete pipe
34	lin.ft. 30-in. reinforced concrete pipe
136	lin.ft. 36-in. reinforced concrete pipe
50	Bounds
3,000	lin.ft. piles
3,500	lin.ft. wood guard rail
100	tons stone for macadam
9,380	cu.yds. cement concrete roadway
250	Joints
2,000	sq.yds. roadway reinforcement

CONTRACT NO. 17—2.94 MILES

1.00	acre clearing and grubbing
21,000	cu.yds. grading
200	cu.yds. concrete masonry
2,000	pounds reinforcement

OFFICIAL PROPOSALS

240	lin.ft. 15-in. reinforced concrete pipe
68	lin.ft. 18-in. reinforced concrete pipe
34	lin.ft. 24-in. reinforced concrete pipe
34	lin.ft. 30-in. reinforced concrete pipe
34	lin.ft. 36-in. reinforced concrete pipe
30	Bounds
75	tons stone for macadam
5,600	cu.yds. cement concrete roadway
150	Joints

Bids may be submitted for Contracts No. 16 and No. 17 separately or combined.

Performance of contract shall commence within ten (10) days after execution of contract and be completed on or before December 1, 1919.

Monthly payments will be made for 90 per cent. of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 15, No. 16 and No. 17."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after June 23, 1919, upon deposit of ($10.00) ten dollars which amount will be refunded upon return of plans and specifications in good condition, at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.
CHAS. M. UPHAM,
Chief Engineer.

Bids: July 1.

Boiler Stokers, Etc.

Central Islip, N. Y.

Sealed proposals for New Boiler, Stokers, etc., and Coal and Ash Handling Equipment, New Central Heating and Lighting Plant, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of specifications Nos. 3276 and 3277. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, New York; at the New York Office of the Department of Architecture, Room 618, Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: June 10, 1919.

OFFICIAL PROPOSALS

Bids: July 10.

Bridge Construction

COUNTY OF WARREN
OFFICE OF SUPERINTENDENT OF HIGHWAYS
WARRENSBURGH, N. Y.
Lake George, N. Y.

Pursuant to the provisions of Chapter 30, Laws of 1909, as amended, sealed proposals will be received by the undersigned at the Supervisors' rooms, Lake George, N. Y., until 2 o'clock on the 10th day of July, 1919, for the construction of the New Riverside Bridge, over the Hudson river, at Riparius, N. Y., between the towns of Chester and Johnsburgh, Warren County, N. Y.

The bridge is to be one 300 foot clear span through truss steel bridge, 19 feet clear roadway of wood block pavement; with a live road capacity of 1235 lbs. per foot of bridge or 15 ton road roller, plus twenty-five per cent. impact.

New concrete abutments and wing-walls are to be built of third class concrete.

The new bridge is to be built on the upstream or north side of the existing suspension bridge.

The estimated cost of the work is $49,750.36.

Plans, specifications, estimates and proposals, etc., may be seen at the office of the county superintendent of highways, Warrensburgh, N. Y., or copies obtained upon the deposit of $5.00 which will be retained for their return in good condition.

The especial attention of bidders is called to the information to bidders contained in the itemized proposal, general specifications, and contract agreements, etc.

Proposals must be presented in a sealed envelope endorsed on the outside, "Proposal for construction of New Riverside Bridge."

Each proposal must be accompanied by cash or certified check payable at sight to the Warren County Treasurer for an amount equal to at least five per cent. of the amount of the proposal. This cash or check will be held by the Warren County Treasurer until the contract and bond are duly executed. The successful bidder will be required to give a performance bond for fifty per cent. of the amount of the contract, such bond to be executed by a surety company to be approved by the Board of Supervisors, or a bond secured by the deposit of collateral securities to be approved by the Board of Supervisors.

The right is reserved to reject any or all bids.

BEECHER GLASSBROOK,
Clerk, Warren County Board
of Supervisors,
Lake George, N. Y.

Dated June 16, 1919.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 4, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 9, 1919, for furnishing and delivering at the site the materials required for the construction of the United States Post Office building at Montevideo, Minn., including materials for concrete, reinforced concrete, stone, granite, brick, structural terra cotta, structural steel, miscellaneous iron and steel work, composition roofing, slate roofing, sheet metal work, skylights, plastering, interior marble, sanitary slate, lumber, millwork, painting, glazing, hardware, plumbing, heating, electric work, etc. Bills of quantities and specifications may be obtained from the Custodian of the site at Montevideo, Minn., or at this office, in the discretion of the Supervising Architect. Jas. A. Wet-

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OFFICIAL PROPOSALS

Bids: July 1.

Filtration Plant

Salem, Ill.

Sealed bids will be received by the City of Salem, Illinois, until 8 o'clock P.M. July 1, 1919, for a complete Mechanical Gravity Filter Plant, consisting of two (2) Units of a capacity of 300,000 gallons each per day.

Separate bids will be received, one for the mechanical equipment and one for the concrete construction work and building. Plans and specifications are on file with the Mayor of the City of Salem and at the office of the Engineers.

Any one desiring copies of the plans and specifications may secure the same by purchasing them from the engineers for the sum of $5.00. This amount will not be refunded and covers the cost of typing and blue printing. The City Council reserves the right to reject any and all bids.

J. E. McMACKIN,
Mayor Salem, Ill.

Caldwell Engineering Co., Engineers, Jacksonville, Illinois.

Bids: July 12.

Storm Sewers and Paving

Albuquerque, New Mexico.

Sealed proposals will be received by the City Manager of Albuquerque, New Mexico, through the City Clerk, on or before two o'clock P.M., Saturday, July 12, 1919, for the construction of storm sewers and paving in the City of Albuquerque, according to plans and specifications on file in the office of the City Engineer.

The approximate quantities are as follows:

105,000 square yards of pavement.
50,000 lineal feet of curb and gutter.
12,000 square yards of alley pavement.

And Storm Sewer Construction as follows:

6,000 feet of 8 inch Clay Vitrified Sewer
500 feet of 10 inch " " "
3,400 feet of 12 inch " " "
1,100 feet of 15 inch " " "
1,400 feet of 36 inch " " "

Also neecssary manholes and catch basins.

Bids will be received on three types of paving; Bitulithic, Asphaltic Concrete, and Reinforced Cement Concrete.

A Certified Check of 10% of the bid must accompany each proposal.

Specifications will be furnished free and plans will be furnished on a deposit of $25. $10 of which will be refunded when plans are returned to the City Engineer.

This is the first of a series of contracts, over a period of the next three years, which will be let in this city.

A. R. HEBENSTREIT,
City Manager.

PROPOSALS FOR CONSTRUCTING STEEL STORAGE BUILDINGS.—Office Chief Construction Div., Washington, D. C.—Sealed proposals will be received until 11 a.m., June 28, 1919, and then opened for constructing steel buildings at Camp Normoyle, San Antonio, Tex.; Camp Holabird, Baltimore, Md., and Camp Jesup, Fort McPherson, Ga. Further information on application to Room 2-327, Bldg. C., Washington, D. C.

United States Engineer Office, Galveston, Texas.—Sealed proposals for furnishing and delivering about 19,000 cubic yards of sharp freshwater sand, about 46,000 barrels of Portland cement, about 38,000 cubic yards of broken stone and about 1,070,000 pounds of reinforcing steel, at Galveston, Texas, will be received at this office until 12 o'clock M. July 7, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: July 15.

Concrete Bridge Construction

FIRST AVENUE BRIDGE
Cedar Rapids, Iowa.

Sealed proposals will be received by the City Council of the City of Cedar Rapids, Iowa, at the office of the City Clerk in the City Hall until 10 o'clock., on the 15th day of July, 1919, for the following described improvement as per plans and specifications now on file in the office of the City Clerk of Cedar Rapids, Iowa.

For the complete construction of a six (6) span concrete-steel arch highway bridge, over and across the Cedar River at its intersection with First Avenue in the City of Cedar Rapids, Iowa, including all appurtenances as described and shown in the plans and specifications for said bridge, and removal of present structure and its foundations. Payment for the work will be made in cash upon monthly estiamtes of the City Engineer.

Each bid must be accompanied by a certified check, enclosed in a separate envelope, said check to be drawn on some known responsible bank and made payable to the order of the City Treasurer of the City of Cedar Rapids, in the sum of Ten Thousand Dollars ($10,000). Such check must not contain any conditions, either in the body of the check or endorsement thereon. All envelopes must be addressed to the City Clerk and endorsed with the name of the bidder, and the improvement said check and proposals are for. Proposals must be submitted in forms as shown by specifications. Certified checks accomapnying proposals will be returned to the unsuccessful bidders, and also to the bidder to whom the contract is awarded, when he shall have entered into contract in the form prescribed, and given bond in sum required.

Bidders must submit, in the same envelope containing certified check, detailed evidence showing that they have a competent organization which has constructed work similar in character; that they have the necessary equipment available to prosecute the work with diligence and complete this improvement in a satisfactory manner. The evidence must also enumerate similar work constructed by bidder, and name of the owner or representatives of the owner who can give information and verification.

Copies of plans and specifications may be obtained from Marsh Engineering Company, consulting Engineers, Des Moines, Iowa, upon receipt of check for $25.00, $20.00 of which will be returned to aplicant when plans are returned in good condition.

The right is reserved to reject any and all bids, and to waive informalities. Proposals received will be acted upon by the City Council on same day they are received.

J. F. RALL,
Mayor

Attest:
L. J. STOREY, City Clerk.

NOTE: The plans show a bridge about 700′ long and 90′ wide.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 11, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 7, 1919, for Gas Mains at the United States Marine Hospital, New York, N. Y. (Stapleton), in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian, New York, N. Y. (Stapleton), in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

Bids: July 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 8, Section No. 1 (Riverdale to Pompton River), Morris County, concrete surface, estimated 45,692 square yards.

State Highway Route No. 9, Section No. 3 (Westfield Cutoff), Union County, grading only, estimated 1772 cubic yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 9, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and at the office of Mr. Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by prospective bidders at either of these offices. Plans and specifications will be furnished on deposit of Ten Dollars ($10.00) upon application to the Division Engineer, 790 Broad Street, Newark, N. J. Bids must be made on the standard proposal forms in th emanner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street aBnk Building, Trenton, New Jersey and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: July 11.

Highway Work

Trenton, N. J.

Notiec is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 13, Section 3 (Three Mile Run to New Brunswick), Middlesex and Somerset Counties, ocncrete surface, estimated 41,000 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Friday, July 11, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10.00) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on th eoutside addressed to State Highway Commission, Broad Street aBnk Bldg., Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of the materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER Chief Clerk.

Bids: June 28.

Street Paving

Oswego, N. Y.

Sealed proposals will be received until 2 P.M., June 28th, 1919, and tren opened by the Department of Works of the City of Oswego, N. Y., for the following pavement construction:

Approximately 6020 Cu.Yds. Reinforced Concrete.

Pavements including Integral Curb.

4400 Lin.Ft. Bituminous Macadam Penetration Method.

With the necessary Sewers, Catch basins, Culverts, etc.

Plans and specifications may be obtained from the City Engineer.

The work will be one contract and each bid must be accompanied by a certified check for ten per cent. (10%) of the amount of the bid.

The Department of Works reserves the right to reject any and all bids.

MICHAEL FITZGIBBONS,
Commissioner of Works.

Bids: June 30.

Road Construction

Elizabeth City, North Carolina.

Sealed proposals for approximately nine miles of hard surface roads will be received at the office of the Pasquotank County Highway Commission, at the court house, of Pasquotank County, Elizabeth City, N. C., until two o'clock P.M., June 30th, 1919.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications. Plans and specifications are on file in the office of T. L. Higgs, County Road Engineer, Room 336, Hinton Building, Elizabeth City, N. C., and will be ready for distribution on an dafter Saturday, June 21st, 1919. A deposit of $10 will be required which will be refunded when the specifications are returned in good condition.

Each proposal must be accompanied by a certified check on a basis of $600.00 per mile of road, which will be returned to the unsuccessful bidders on the day of letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Pasquotank County Highway Commission.

The Commission reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the county.

At the same time separate bids will be received for all of the material to complete this job. Viz., brick, cement, sand, gravel or stone, etc.

Pasquotank County Highway Commission.
T. L. HIGGS, Engineer.
W. J. WOODLEY, Chairman.

Bids: July 2.

Paving

Hanover, Pa.

Sealed proposals will be received by the undersigned at his office No. 15 Carlisle St., Hanover, Pa., until 4 P.M., July 2nd, 1919, for Street Improvement.

The work will consist of about 23,006 sq.yds. of paving.

Bids will be received for various types of paving all on a six inch concrete base.

Proposals must be market "Proposal for street paving."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for $600.00 as evidence of good faith.

Copies of the Specifications, form of proposal, etc., can be had upon application to the undersigned.

The right is reserved to reject any or all bids.

A. H. KOHR, Borough Engineer.
Hanover, Pa.

Bids: July 7.

Sanitary Sewerage System

Pleasantville, New Jersey.

Sealed proposals will be received by the Common Council of the City of Pleasantville, N. J., at the City Hall, on the 7th day of July, 1919, until 8 o'clock P.M., for the construction of a sanitary sewerage system, consisting of approximately 9.3 miles of 8", 10", 12" and 15" Terra Cotta Pine Sewers, 1260 "Y" Branches, 5" T. C. House Connections, 123 Manholes, 15 Lampholes and 12 Flush Tanks.

Each proposal must be accompanied by a certified check, made payable to the City of Pleasantville, for the sum of $5000.00. An indemnification bond for an amount equal to 100% of the contract price will be required.

Plans, specifications and contract form will be on file, and may be seen at the City Hall, Pleasantville, N. J., or at the office of the Engineers, Remington & Vosbury, 601 Market Street, Camden, N. J. Complete sets of the plans and specifications may be obtained from the Engineers upon a deposit of $10.00, of which sum $5.00 will be refunded upon return, by July 20th, of the plans in good condition.

The City reserves the right to reject any or all bids.

NEHEMIAH ANDREWS,
City Clerk.

Bids: June 23.

Centrifugal Pump

City of Bethlehem, Pa.

Bids will be received by the Bureau of Water for the furnishing and installation of a two million gallon electrically driven centrifugal pump, on or before June 23, 1919.

The right is reserved to reject any or all bids.

R. L. FOX, City Engineer.

OFFICIAL PROPOSALS

Bids: July 14.

Sewer System Construction

North Mankato, Minn.

Sealed proposals for the construction of a sewer system will be received by the Recorder of the Village of North Mankato, Minnesota, till nine o'clock P.M., July 14th, 1919, and all proposals received will be opened and considered at, or as soon as possible after that time.

Each bid must be accompanied by a certified check or a satisfactory draft payable to the Treasurer of said Village for 15% of the amount of the bid.

The work to be done is approxiamtely as follows: 3 pumping stations or lifts; 75 manholes, 2-14" Valvés, 24,100 feet of vitrified clay sewer pipe from 8" to 15", 24,200 feet of trench from 5 feet to 16 feet deep.

The work is divided tentatively into three sections numbered one, two and three as shown on the plan, and bids are desired for section one by itself, for sections one and two together and for the whole work.

Plans and specifications can be seen at the office of the Recorder or Engineer of said village. Copies of plan showing depths and sizes and quantities of pipe will be sent by mail for $1.50 each; Copies of details of lifts and manholes for $2.00 per set. Specifications are the usual form for sewers. Copies will be furnished at cost.

The right is reserved to reject any or all bids, or to accept any bid in whole or in part.

Bids: July 1.

Street Improvement

PARK STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Park Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Dated June 12, 1919.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.

We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

OFFICIAL PROPOSALS

Bids: July 5.

Road Work

Pekin, Ill.

Sealed proposals will be received by the Highway Commissioner of Pekin Township, Tazewell County, Illinois, at the Office of the Co. Supt. of Highways, Court House, Pekin, Ill., until 2 P.M., July 5, 1919, for the construction of a 16 ft. pavement 8000 ft. long including rading and culverts. Alternate bids will be received on (1) Portland Cement Concrete, and (2) Monolithic brick.

Plans and specifications on file with R. E. Rollins, Town Clerk, Pekin, Ill. Plans may be taken out for temporary use while inspecting the proposed work. For further information, write F. S. Cook, Co. Supt. of Highways, Mackinaw, Ill.

A certified check for $200, made payable to the Highway Commissioner, must accompany each bid.

The right is reserved to reject any or all bids.

ADOLPH NIERSTHEIMER, JR.,
Highway Commissioner of Pekin
Township, Pekin, Ill.

Bids: June 30.

Water Filtration Plant

City of Salem, N. J.

Sealed proposals, marked "Proposal for Water Filtration Plant," and addressed to the "City of Salem," New Jersey, will be received until 8 o'clock P.M. on Monday evening, June 30, 1919, at the Council Chamber in the City of Salem, New Jersey, for furnishing all of the materials and labor and installing a Mechanical Filtration Plant including coagulating basin, chemical house, filter house, and all appliances and appurtenances complete.

Specifications and information may be obtained at the office of William H. Boardman, Engineer, 426 Walnut Street, Philadelphia, or at the office of N. S. Hires, Water Superintendent, Dunn Building, Salem, New Jersey.

A certified check for $500.00 drawn to the order of L. L. Sinnickson, Treasurer of the City of Salem, New Jersey, or equivalent Bidder's Bond, must accompany each proposal. Should contract for the work on which bids are sought be awarded on Monday evening, June 30, 1919, the checks of the unsuccessful bidders will be returned.

The City of Salem reserves the right to reject any and all bids, to readvertise if necessary and to accept that bid which in the judgment of the Mayor and Common Council is for the best interests of the City of Salem.

By order of Common Council,
W. E. DUNN,
Recorder.

Dated Salem, N. J., June 9, 1919.

POSITIONS VACANT

ASSISTANT superintendent or general foreman wanted on bridge work. Requirements, energy and good judgment. Address P-746, Eng. News-Record, Chicago.

C. E. DRAFTSMAN wanted, highway and drainage a specialty. Furnish reference and sample of lettering. Good opportunity for right man. State salary expected. Jno. M. Harbert, Eng. Co., Indianola, Miss.

COMPETENT structural engineer wanted for position of contracting engineer with old established comapny doing principally industrial building and railroad work. Must be a man of good address who has had some experience in estimating and selling. Location Middle West. Give full details of experience, references and salary expected. Address P-615, Eng. News-Record, Chicago.

COMPETENT structural and reinforced concrete engineer wanted by sales engineering and fabricating company in Philadelphia, to take charge estimating and engineering; one thoroughly familiar with building construction, competitive designing and estimating desired. Proper man will be given opportunity to secure interest in company. Give full description of yourself, experience, references, salary desired, etc., in first letter. Replies treated with strict confidence and acknowledged. Address P-745, Eng. News-Record, Philadelphia.

CONTRACTING engineer for large new structural steel fabricating plant. Applicants must be experienced in structural steel sales and be thoroughly competent to design and estimate steel structures. In reply state age, experience, if married, salary desired, and if possible inclose recent photo. Birmingham Steel Corporation, Birmingham, Ala.

CONCRETE DESIGNER wanted by reinforced concrete builders in Rocky Mountains. The applicant must have a solid experience as a concrete designer, and will have to work out independently intricate problems, such as rigid frames, long span arches, etc. First-class opportunity for a good man. P-690, San Francisco, Calif.

DESIGNING engineer, detailers and checkers wanted, experienced in crane and derrick work. Must know their business thoroughly and be thoroughly experienced. Not an opportunity to acquire experience. P-768, Eng. News-Record.

DRAFTSMAN wanted at once—First-class; state age, nationality, references and experience in first letter. Permanent position in central South if satisfactory. P-747, Eng. News-Record, Leader-News Bldg., Cleveland.

DRAFTSMAN with experience on design of industrial buildings, steel, reinforced concrete and mill construction. Give full details in first letter as to age, education, references, salary expected and earliest date available. Technical graduate preferred. P-744, Eng. News-Record.

DRAFTSMAN wanted—On construction work, New York City; technical graduate preferred; give past experience and salary desired. Addres P-742, Eng. News-Record.

DRAFTSMAN wanted, competent to originate designs for old-established company in the vicinity of New York, about to begin the manufacture of rolling steel shutters. State experience, salary and when free. Permanent position to right man. P-568, Eng. News-Record.

Delay Is Dangerous
Don't Wait

On public work it is absolutely necessary to provide your bond promptly. Some contractors, who wait till the last minute to secure their bond, "sweat blood"

IT CAN BE AVOIDED—USE SWART SERVICE—DON'T DELAY

It costs no more and you secure the personal service of a trained engineering expert on contractors' insurance.

HARMON V. SWART
19 Liberty Street, New York

WANTED

CONTRACTOR

to move one to two hundred thousand yards dirt

Sand overburden on clay. Will put in steam shovel, contractor to purchase and apply work in payment.

The Johnson-Porter Clay Co.
McKensie, Tenn.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: July 15.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, June 16th, 1919.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until 12 o'clock noon of Tuesday, July 15, 1919, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—1—

TERMINAL CONTRACT NO. 43

For constructing a Barge Canal terminal and a frame freighthouse at Flushing, Borough of Queens, New York City.

Contract plans, sheets 1 to 10, inclusive.

—2—

TERMINAL CONTRACT NO. 112.

For furnishing, delivering and testing industrial freight-handling trailers and stevedore freight-handling trucks for Barge Canal terminals in New York City:

Contract plans, sheets 1 and 2.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., at the canal office, Spaulding's Exchange, Buffalo, N. Y., and at office of State Engineer, Hall of Records, New York City.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

Special price for Official Proposals, $3.60 an inch — Copy for Official Proposals can be received until Wednesday, 10 a.m., for issue out the next morning.

The publication of an advertisement on this page is an official notice that bids are wanted from other than local bidders.

It is also a guarantee that maximum competition is invited because Engineering News-Record is the *one* nationally recognized medium for Proposal advertising. Its Searchlight Section is read each week by nearly every worth-while contractor in this country who bids on public work outside his own city.

OFFICIAL PROPOSALS

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

E. S. WALSH,
Superintendent of Public Works.

OFFICIAL PROPOSALS

Bids: July 8.

Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT

Harrisburg, Pa.

Sealed proposals will be received at the State Capitol until 10 A.M., July 8, 1919, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of the following pavements: 45,051 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick on a Concrete Foundation or Reinforced Concrete in Bradford County; 14,883 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Bucks County; 41,673 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Butler County; 12,355 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Centre County; 30,995 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Clearfield County; 2903 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Clinton County; 24,900 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete and Hillside Vitrified Brick in Delaware County; 30,197 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Fayette County; 46,297 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Lehigh County; 22,705 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Luzerne County; 80,363 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Somerset County; 30,335 linear feet of Reinforced Concrete in Susquehanna County; 17,412 linear feet of either Bituminous Surface Course and Hillside Vitrified Brick or Reinforced Concrete in Sullivan County; 28,831 linear feet of either Bituminous Surface Course on a Concrete Foundation and Hillside Vitrified Brick or Reinforced Concrete in Tioga County; 32,047 linear feet of Reinforced Concrete and Hillside Vitrified Brick in Westmoreland County; 71,063 linear feet of either Bituminous Surface Course on a Concrete Foundation or Reinforced Concrete in Lackawanna and Wyoming Counties, and 32,744 linear feet of Reinforced Concrete and Hillside Vitrified Brick in York County. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa.

LEWIS S. SADLER,
State Highway Commissioner.

U. S. ENGINEER OFFICE, 725 Central Bldg., Los Angeles, Cal. Sealed proposals for constructing silt diversion works near Los Angeles and Long Beach Harbors, California, will be received here until 11 A.M., July 18, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: July 9.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 8, Section No. 1 (Riverdale to Pompton River), Morris County, concrete surface, estimated 45,692 square yards.

State Highway Route No. 9, Section No. 3 (Westfield Cutoff), Union County, grading only, estimated 1772 cubic yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 9, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and at the office of Mr. Roy Mullins, Division Engineer, 790 Broad Street, Newark, N. J., and may be inspected by prospective bidders at either of these offices. Plans and specifications will be furnished on deposit of Ten Dollars ($10.00) upon application to the Division Engineer, 790 Broad Street, Newark, N. J. Bids must be made on the standard proposal forms in th emanner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to State Highway Commission, Broad Street aBnk Building, Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER, Chief Clerk.

Bids: July 1.

Street Improvement

POPLAR STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Poplar Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Dated June 12, 1919.

OFFICIAL PROPOSALS

Bids: July 1.

Construction, Heating, Etc.

Middletown, N. Y.

Sealed proposals for construction, heating, sanitary and electric work, new building for chronic patients, Middletown State Homeopathic hospital, Middletown, N. Y., will be received by the State Hospital Commission at the Capitol, Albany, N. Y., until 3 o'clock P.M. on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3246, 3247, 3248 and 3249. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Middletown State Hospital, Middletown, N. Y., at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Caiptol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

E. S. ELWOOD,
Secretary, State Hospital Commission.

Dated: May 29, 1919.

Bids: July 2.

Boilers and Stokers

Lorain, Ohio.

Sealed proposals will be received by the Board of Education, Lorain, Ohio, until 12 o'clock noon, July 2, 1919, for the installation of water tube boilers and stokers and erection of a radial brick chimney at the High School Boiler House as per plans and specifications prepared by the Watson Engineering Co. of Cleveland, Ohio.

Plans and specifications are on file at the office of the Clerk of the Board of Education, Lorain, Ohio, and at the office of the Watson Engineering Co., 1101 Hippodrome Bldg., Cleveland, Ohio.

Bidders shall be required to state when they will begin and finish the work after the contract shall have been entered into.

Each bid must contain the name of every person interested in the same and must be accompanied by a certified check, payable to the Board of Education of Lorain, Ohio, in the sum of $500 as a guarantee, that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

Proposals must be sealed up, addressed to the Clerk and indorsed on the outside, plainly showing the items bid upon and the name of bidder.

The Board reserves the right to reject any, part of any or all bids or proposals.

A satisfactory bond of not less than fifty (50) per cent. of the contract price will be required on all contracts.

By order of the Board of Education, Lorain, Ohio.

E. BRUELL,
Clerk.

OFFICIAL PROPOSALS

Bids: July 1

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M., on Tuesday, the 1st day of July, 1919, for the improvement of the following highways:

Albany—One highway: 3.93.
Herkimer—Two highways: 5.84 and 5.67.
Oneida—One highway: 0.45.
Putnam—One highway. 3.33.
Saratoga—Two highways: 9.06 and 1.52.
Suffolk—Two highways: 6.59 and 4.99.

ALSO FOR THE COMPLETION OF THE FOLLOWING HIGHWAYS:

Cattaraugus—One highway: 6.98.
Cayuga—Two highways: 3.89 and 4.39.
Cortland—One highway: 6.07.
Erie—One highway: 6.03.
Franklin—One highway: 1.99.
Hamilton—One highway: 5.01.
Jefferson—One highway: 4.05.
Madison—One highway: 5.65.
Niagara—One highway: 8.00.
Schenectady—One highway: 5.62.
Wayne—One highway: 5.85.

AND ALSO FOR THE REPAIR OF THE FOLLOWING HIGHWAYS:

Rensselaer—One contract, reconstruction.
Ulster—One contract, resurfacing.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the division engineers in whose division the roads to be improved, completed or repaired are located. The addresses of the division engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

FRED'K STUART GREENE,
ROYAL K. FULLER, Commissioner.
Secretary.

Bids: July 7.

Concrete Bridge Construction

Elmira, N. Y.

Sealed proposals for the construction of a concrete bridge approximately 830 feet long and 30 feet high, consisting of eight arches, over the Chemung River at Main Street in the City of Elmira, Chemung County, New York, will be received by the Board of Public Works of the City of Elmira, N. Y., at the office of the City Clerk in the City Hall, until 11:00 o'clock A.M., Monday, July 7, 1919, and publicly opened at that time.

Bids must be made upon proposal blanks attached to the specifications, and must be accompanied by a Certified Check in a sum equal to at least five per cent. (5%) of the amount of the bid and made payable, without reservations, to the order of the Mayor of the City of Elmira, N. Y.

Plans and specifications may be seen at the office of the City Engineer in the City Hall, Elmira, N. Y. Copies of the plans and specifications may be had by making a deposit of Ten Dollars ($10.00), which deposit will be returned when plans are returned in good condition on or before the date of the letting.

The right is reserved to reject any or all bids.

LOUIS C. ANDREW,
of the City of Elmira, N. Y.

OFFICIAL PROPOSALS

Bids: July 15.

Concrete Bridge Construction

FIRST AVENUE BRIDGE

Cedar Rapids, Iowa.

Sealed proposals will be received by the City Council of the City of Cedar Rapids, Iowa, at the office of the City Clerk in the City Hall until 10 o'clock., on the 15th day of July, 1919, for the following described improvement as per plans and specifications now on file in the office of the City Clerk of Cedar Rapids, Iowa.

For the complete construction of a six (6) span concrete-steel arch highway bridge, over and across the Cedar River at its intersection with First Avenue in the City of Cedar Rapids, Iowa, including all appurtenances as described and shown in the plans and specifications for said bridge, and removal of present structure and its foundations. Payment for the work will be made in cash upon monthly estiamtes of the City Engineer.

Each bid must be accompanied by a certified check, enclosed in a separate envelope, said check to be drawn on some known responsible bank and made payable to the order of the City Treasurer of the City of Cedar Rapids, in the sum of Ten Thousand Dollars ($10,000). Such check must not contain any conditions, either in the body of the check or endorsement thereon. All envelopes must be addressed to the City Clerk and endorsed with the name of the bidder, and the improvement said check and proposals are for. Proposals must be submitted in forms as shown by specifications. Certified checks accomapnying proposals will be returned to the unsuccessful bidders, and also to the bidder to whom the contract is awarded, when he shall have entered into contract in the form prescribed, and given bond in sum required.

Bidders must submit, in the same envelope containing certified check, detailed evidence showing that they have a competent organization which has constructed work similar in character; that they have the necessary equipment available to prosecute the work with diligence and complete this improvement in a satisfactory manner. The evidence must also enumerate similar work constructed by bidder, and name of the owner or representatives of the owner who can give information and verification.

Copies of plans and specifications may be obtained from Marsh Engineering Company, consulting Engineers, Des Moines, Iowa, upon receipt of check for $25.00, $20.00 of which will be returned to aplicant when plans are returned in good condition.

The right is reserved to reject any and all bids, and to waive informalities. Proposals received will be acted upon by the City Council on same day they are received.

J. F. RALL,
Mayor.

Attest:

L. J. STOREY, City Clerk.

NOTE: The plans show a bridge about 700′ long and 90′ wide.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 11, 1919.—Sealed proposals will be opened in this office at 3 P.M., July 7, 1919, for Gas Mains at the United States Marine Hospital, New York, N. Y. (Stapleton), in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian, New York, N. Y. (Stapleton), in the discretion of the Supervising Architect.—James A. Wetmore, Acting Supervising Architect.

OFFICIAL PROPOSALS

Bids: July 7.

Bridge Construction

McAlester, Okla.

Notice is hereby given that sealed proposals for the construction of Highway Improvement in Pittsburg County, Oklahoma, will be received by the County Commissioners of Pittsburgh County, in the office of the County Clerk of said County, at McAlester, Oklahoma, until two o'clock P.M., Monday, July 7th, 1919. Said bids will then be publicly opened.

Description of work to be done:

To construct a steel Highway Bridge across Gaines Creek, approximately four (4) miles northeast of Canadian, Oklahoma, of approximately 354 feet in total length, consisting of three (3) spans of approximately 118 feet in length, and the necessary abutments and piers therefor. width of roadway 18 feet.

Detailed plans, specifications, estimates and form of proposal sheet may be seen for examination at the office of the County Engineer or the County Clerk, in McAlester, Pittsburg County, Oklahoma, or at the office of the State Engineer, in Oklahoma City, Oklahoma, or may be obtained by depositiing $5.00 with the County Engineer at McAlester. Such deposits will be returned only upon the return of the plans in good condition within two weeks after the letting.

A certified check for $1000.00 drawn upon some bank in the State of Oklahoma, and made payable to the County of Pittsburg, State of Oklahoma, must accompany each proposal. The right is reserved to reject any and all bids.

Proposals shall be submitted in sealed envelopes and marked "Bids for the Construction of Gaines Creek Bridge near Canadian, Oklahoma."

Proposals may be sent by mail, and when sent by mail shall be enclosed in an additional sealed envelope and marked as indicated above. All proposals otherwise submitted will be rejected as irregular. Only sealed bids will be considered.

All bids received will be retained by the County Commissioners and will not be returned to the bidders.

W. J. KINDRICK, County Clerk.

Bids: July 2.

High School

Sterling, Illinois.

Sealed proposals will be received at the office of Carl E. Sheldon, attorney, Sterling, Illinois, for the construction of an addition to the Sterling Township High School. Estimated cost, $50,000.00 to $60,000.00. Plnas and specifications, office of Fred W. Honens, Sterling, Illinois. Certified check for 5% to accompany bid.

D. L. MILLER,
Clerk.

PROPOSALS FOR CONSTRUCTING STEEL STORAGE BUILDINGS.—Office Chief Construction Div., Washington, D. C.—Sealed proposals will be received until 11 a.m., June 28, 1919, and then opened for constructing steel buildings at Camp Normoyle, San Antonio, Tex.; Camp Holabird, Baltimore, Md., and Camp Jesup, Fort McPherson, Ga. Further information on application to Room 2-327, Bldg. C., Washington, D. C.

United States Engineer Office, Galveston, Texas.—Sealed proposals for furnishing and delivering about 19,000 cubic yards of sharp freshwater sand, about 46,000 barrels of Portland cement, about 38,000 cubic yards of broken stone and about 1,070,000 pounds of reinforcing steel, at Galveston, Texas, will be received at this office until 12 o'clock M. July 7, 1919, and then opened. Information on application.

OFFICIAL PROPOSALS

Bids: July 10.

Bridge Construction

COUNTY OF WARREN
OFFICE OF SUPERINTENDENT OF HIGHWAYS
WARRENSBURGH, N. Y.

Lake George, N. Y.

Pursuant to the provisions of Chapter 30, Laws of 1909, as amended, sealed proposals will be received by the undersigned at the Supervisors' rooms, Lake George, N. Y., until 2 o'clock on the 10th day of July, 1919, for the construction of the New Riverside Bridge, over the Hudson river, at Riparius, N. Y., between the towns of Chester and Johnsburgh, Warren County, N. Y.

The bridge is to be one 300 foot clear span through truss steel bridge, 19 feet clear roadway of wood block pavement; with a live road capacity of 1235 lbs. per foot of bridge or 15 ton road roller, plus twenty-five per cent. impact.

New concrete abutments and wing-walls are to be built of third class concrete.

The new bridge is to be built on the upstream or north side of the existing suspension bridge.

The estimated cost of the work is $49,750.36.

Plans, specifications, estimates and proposals, etc., may be seen at the office of the county superintendent of highways, Warrensburgh, N. Y., or copies obtained upon the deposit of $5.00 which will be retained for their return in good condition.

The especial attention of bidders is called to the information to bidders contained in the itemized proposal, general specifications, and contract agreements, etc.

Proposals must be presented in a sealed envelope endorsed on the outside, "Proposal for construction of New Riverside Bridge."

Each proposal must be accompanied by cash or certified check payable at sight to the Warren County Treasurer for an amount equal to at least five per cent. of the amount of the proposal. This cash or check will be held by the Warren County Treasurer until the contract and bond are duly executed. The successful bidder will be required to give a performance bond for fifty per cent. of the amount of the contract, such bond to be executed by a surety company to be approved by the Board of Supervisors, or a bond secured by the deposit of collateral securities to be approved by the Board of Supervisors.

The right is reserved to reject any or all bids.

BEECHER GLASSBROOK,
Clerk, Warren County Board
of Supervisors,
Lake George, N. Y.

Dated June 16, 1919.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals will be received here until 12 M., July 2, 1919, and then opened for dredging in Shrewsbury River, and Shoal Harbor and Compton Creek, N. J. Bids for either or both of these works will be considered. Further information on application.

PROPOSALS FOR EAST WING OF GUN SHED and Wings for Artillery and Cavalry Barracks.—Office of Quartermaster, West Point, N. Y.—Sealed proposals will be received here until 12 M., June 30, 1919, and then opened, for construction of East Wing of Gun Shed and Wings for Artillery and Cavalry Barracks. Information on application.

Bids: July 1.

Street Improvement

HACKENSACK AVENUE IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Hackensack Avenue in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,
Village Clerk.

Date June 12, 1919.

Bids: July 9.

Paving

Halifax, N. S.

Sealed tenders, addressed to His Worship the Mayor and endorsed "Tender for Paving" will be received at the office of the Clerk of Works, City Hall, Halifax, Nova Scotia, until 10 o'clock a.m., on Wednesday, July 9th, 1919, for paving certain streets in the City of Halifax.

The approximate quantities are:

23,000 sq.yds. of granite block pavement on concrete base; 133,000 sq.yds. of bituminous pavement on concrete base; 30,000 sq. yds. of bituminous pavement on macadam base; 33,000 lineal feet of concrete curb and gutter.

Each tender must be accompanied by a certified cheque payable in Halifax to the City Treasurer for the amount set forth in the forms of tender for each street, which cheque will be forfeited to the City if the bidder fails to execute the contract if awarded to him, within five days of the notice of such award.

The successful bidder will be required to furnish a bond to the amount of 25% of the amount of the contract as estimated by the City Engineer for the faithful performance of the contract.

Plans and specifications may be seen and forms of tender and all other information obtained at the City Engineer's office, City Hall, Halifax.

The City reserves the right to reject any or all tenders or to accept any tender which it deems best.

F. W. W. DOANE,
City Engineer.

Halifax, Nova Scotia.
June 18th, 1919.

Bids: July 1.

Macadam Construction

Lewisburg, W. Va.

Until noon, July 1st, 1919, sealed bids will be received by the County Court of Greenbrier County for the construction of 2 miles of Penetration Macadam pavement 16 feet wide, beginning at the end of the present pavement, three miles north of the town of Lewisburg and extending along the Marlins Bottom Turnpike. Grading has been done and local limestone will be used, haul 1 mile. For specifications and information apply to Frank K. Rader, County Engineer, Lewisburg, W. Va.

The County Court reserves the right to reject any and all bids.

Bids: June 30.

Road Construction

Elizabeth City, North Carolina.

Sealed proposals for approximately nine miles of hard surface roads will be received at the office of the Pasquotank County Highway Commission, at the court house, of Pasquotank County, Elizabeth City, N. C., until two o'clock P.M., June 30th, 1919.

Proposals must be made in accordance with the plans and specifications, and on the blank forms furnished by the engineer, which are part of the specifications. Plans and specifications are on file in the office of T. L. Higgs, County Road Engineer, Room 336, Hinton Building, Elizabeth City, N. C., and will be ready for distribution on an dafter Saturday, June 21st, 1919. A deposit of $10 will be required which will be refunded when the specifications are returned in good condition.

Each proposal must be accompanied by a certified check on a basis of $600.00 per mile of road, which will be returned to the unsuccessful bidders on the day of letting and to the successful bidder after the contract is properly executed and the required idemnity bond furnished and approved by the Pasquotank County Highway Commission.

The Commission reserve the right to reject any or all bids, to waive defects or accept any bid they may deem for the best interest of the county.

At the same time separate bids will be received for all of the material to complete this job. Viz., brick, cement, sand, gravel or stone, etc.

Pasquotank County Highway Commission.
T. L. HIGGS, Engineer.
W. J. WOODLEY, Chairman.

Bids: June 28.

Highway Construction

ERIE COUNTY, PENNSYLVANIA

North East, Pa.

Sealed proposals will be received by the North East Township Road Supervisors, at their office at North East, Pa., until 10 A.M., June 28, 1919, when bids will be opened and scheduled, and contracts awarded as soon thereafter as possible, for the construction of approximately 8000 ft. of reinforced concrete pavement, in North East Township, on the road leading from North East Boro. to Findley Lake. Construction to be according to Pennsylvania State specifications. Bidding blanks and specifications may be obtained free and plans upon payment of $2.50 per set, upon application at the office of Hill & Hill, Engineers, Marine Bank Bldg., Erie, Pa., or at their North East, (Pa.) office. They also can be seen at either of the above offices. The right is reserved to reject any or all bids and to waive defects in forms.

NORTH EAST TOWNSHIP,
Road Supervisors.

U. S. ENGINEER OFFICE,. Pittsburgh, Pa.—Sealed proposals will be received at the U. S. Engineer Office, Pittsburgh, Pa., until 12 noon (Eastern time), July 7, 1919. and then opened, for constructing locks and fixed dams in the Ohio River, near Emsworth, Pa. Further information on application.

GATE-OPERATING MACHINERY.—U. S. Engineer Office, First District, Cincinnati, O.—Sealed proposals will be received here until 2 P.M., July 8, 1919, and then opened, for furnishing and delivering gate-operating machinery for Dams Nos. 33 and 39. Ohio River. Information on application.

Bids: July 2.

Highway Work

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 1, Section No. 3 (Robbinsville to Windsor), Mercer County, concrete surface, estimated 26,843 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Wednesday, July 2, 1919, at 10:30 A.M.

Drawings, specifications and forms of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of ten dollars ($10), to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on the outside, addressed to

STATE HIGHWAY COMMISSION,
Broad Street Bank Building,
Trenton, New Jersey,

and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission,

A. LEE GROVER,
Chief Clerk

Bids: July 5.

Road Work

Pekin, Ill.

Sealed proposals will be received by the Highway Commissioner of Pekin Township, Tazewell County, Illinois, at the Office of the Co. Supt. of Highways, Court House, Pekin, Ill., until 2 P.M., July 5, 1919, for the construction of a 16 ft. pavement 8000 ft. long including rading and culverts. Alternate bids will be received on (1) Portland Cement Concrete, and (2) Monolithic brick.

Plans and specifications on file with R. E. Rollins, Town Clerk, Pekin, Ill. Plans may be taken out for temporary use while inspecting the proposed work. For further information, write F. S. Cook, Co. Supt. of Highways, Mackinaw, Ill.

A certified check for $200, made payable to the Highway Commissioner, must accompany each bid.

The right is reserved to reject any or all bids.

ADOLPH NIERSTHEIMER, JR.,
Highway Commissioner of Pekin Township, Pekin, Ill.

Bids: July 8.

Road Construction

Elkins, W. Va.

Sealed bids will be received until one o'clock P.M., Tuesday, July 8, 1919, by the County Court of Randolph County, West Virginia, for the completion of the work of constructing approximately nineteen miles of improved roads and streets in Leadsville District of said Randolph County, to be let in sections. Said work having been heretofre let to Contract to the R. M. Hudson Paving and Construction Co. and not completed by it. And bids having been received therefore on June 2, 1919, and rejected. A certified check in the sum of $500 must accompany each bid, which will be forfeited as liquidated damages in case bidder fails to comply if his bid is accepted. The successful bidder will be required to furnish a bond equal to the total contract price, and to be approved by the County Court. Plans and specifications for this work and a description of the sections are on file in the offices of the County Clerk and Road Engineer, Elkins, West Virginia. The County Court reserves the right to reject any and all bids.

LEE CROUCH,
President of the County
Court of Randolph County.

[illegible]HADDEUS PRITT,
Clerk of the County
Court of Randolph Co.

The completion of said work on said roads will be let in five sections averaging about four miles each.

Bids will be received for concrete, macadam, tarvia, warrenite and asphaltic concrete construction. Bids will be received at unit prices.

Full information as to material, etc., will be furnished by the undersigned.

P. B. BLOOMFIELD,
Elkins, W. Va.

Bids: July 8.

Street Construction

Nashville, N. C.

Sealed proposals will be received until 11 o'clock A.M. on Tuesday, the 8th day of July, 1919, by the undersigned for the Commissioners of the Town of Nashville, Nashville, North Carolina, for the construction of street, side walks and curbing on Washington and Depot Streets in the town of Nashville, consisting of about one and one-fourth miles. The street construction to be five inches; side walks and curbing to be in accordance with the usual requirements for cities and towns.

Certified check of 5% of total cost will be required with each bid. Bids will be opened at the office of Finch & Vaughan, in said town of Nashville, North Carolina, at 12 o'clock M., July 8th, 1919.

Right reserved to reject any and all bids.

LEON T. VAUGHAN, Town Clerk,
Nashville, N. C.

U. S. ENGINEER OFFICE, FIRST DISTRICT, NEW YORK CITY, Room 710, Army Building, 39 Whitehall Street, New York City. June 23, 1919.—To whom it may concern: Whereas, navigation is obstructed and endangered by wreck of steamship PORT PHILLIP sunk in the fairway of the main entrance to New York Harbor: Notice is hereby given that unless said vessel is removed by the owners within thirty days from June 23, 1919, it will be removed by the United States under authority of law. Sealed proposals will be received here until 12 M., July 23, 1919, and then opened, for removing wreck of steamship PORT PHILLIP. Information on application.

Bids: July 11.

Highway Work

Trenton, N. J.

Notiec is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the improvement of the following:

State Highway Route No. 13, Section 3 (Three Mile Run to New Brunswick), Middlesex and Somerset Counties, ocncrete surface, estimated 41,000 square yards.

Bids for the above will be opened and read in public at the office of the State Highway Commission, Broad Street Bank Bldg., Trenton, N. J., on Friday, July 11, 1919, at 10:30 A.M.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the said Department at Trenton, N. J., and may be inspected by, or furnished on deposit of Ten Dollars ($10.00) to prospective bidders. Bids must be made on the standard proposal forms in the manner designated therein and as required by the specifications, same to be enclosed in sealed envelopes, bearing the name and address of bidder and name of the road on th eoutside addressed to State Highway Commission, Broad Street aBnk Bldg., Trenton, New Jersey, and must be accompanied by a certified check for not less than ten per cent. (10%) of the amount of the bid, and be delivered at the above place on or before the hour named. Copies of standard proposal form will be furnished on application. Prospective bidders are directed to obtain the State Highway Department's approval of the materials which they propose using in the work before submitting bids.

Each bidder must accompany his bid with a certificate from a surety company, duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in, and in accordance with the provisions of said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER Chief Clerk.

Bids: July 9.

Highway Construction

THE STATE OF DELAWARE

Dover, Delaware.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until two (2) o'clock, P.M., July 9, 1919, and at that place and time publicly opened, for the construction of 8.27 miles of State Highway (cement concrete) in New Castle and Kent Counties, Delaware, involving the following approximate quantities:

CONTRACT NO. 15—0.42 MILES

21,500	cu.yd. grading
10	cu.yd. concrete masonry
300	pounds reinforcement
50	lin.ft. 15-in. reinforced concrete pipe
34	lin.ft. 30-in. reinforced concrete pipe
6	bounds
1,500	tons stone for macadam
600	sq.yd. penetration macadam

CONTRACT NO. 16—4.91 MILES

7.5	acres clearing and grubbing
56,000	cu.yd. grading
1,000	cu.yd. concrete masonry
32,000	pounds reinforcement
400	lin.ft. 15-in. reinforced concrete pipe
68	lin.ft. 18-in. reinforced concrete pipe
68	lin.ft. 24-in. reinforced concrete pipe
34	lin.ft. 30-in. reinforced concrete pipe
136	lin.ft. 36-in. reinforced concrete pipe
50	Bounds
3,000	lin.ft. piles
3,500	lin.ft. wood guard rail
100	tons stone for macadam
9,380	cu.yds. cement concrete roadway
250	Joints
2,000	sq.yds. roadway reinforcement

CONTRACT NO. 17—2.94 MILES

1.00	acre clearing and grubbing
21,000	cu.yds. grading
200	cu.yds. concrete masonry
2,000	pounds reinforcement
240	lin.ft. 15-in. reinforced concrete pipe
68	lin.ft. 18-in. reinforced concrete pipe
34	lin.ft. 24-in. reinforced concrete pipe
34	lin.ft. 30-in. reinforced concrete pipe
34	lin.ft. 36-in. reinforced concrete pipe
30	Bounds
75	tons stone for macadam
5,600	cu.yds. cement concrete roadway
150	Joints

Bids may be submitted for Contracts No. 16 and No. 17 separately or combined.

Performance of contract shall commence within ten (10) days after execution of contract and be completed on or before December 1, 1919.

Monthly payments will be made for 90 per cent. of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked: "Proposal for the Construction of a State Highway under Contract No. 15, No. 16 and No. 17."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen, and index plans and specifications may be obtained after June 23, 1919, upon deposit of ($10.00) ten dollars which amount will be refunded upon return of plans and specifications in good condition, at the office of

STATE HIGHWAY DEPARTMENT,
DOVER, DELAWARE.
CHAS. M. UPHAM,
Chief Engineer.

Bids: July 1

Jail Construction, Etc.

Toms River, N. J.

For the erection and completion of alterations and additions to jail and new wardens' house at Toms River, Ocean County, N. J. will be received on July 1st, 1919, at 12 o'clock noon and then publicly opened, each "bid' to be accompanied with a certified check or bid bond for $1000 to guarantee faithful execution of contract. All "bids" to be addressed to E. R. Yoder, chairman of building committee of the Ocean County Board of Freeholders. Plans are on file at the office of Thomas Stephen, architect, Room 304, Temple Building, Camden, N. J.

Rights reserved to reject any or all "bids."

Bids: July 16.

Pumping Engine

OFFICIAL NOTICE C. P. NO. 32
OFFICE OF THE CENTRAL BOARD OF PURCHASES

City of Milwaukee, Wis.

Sealed proposals will be received at this office until Wednesday, July 16th, 1919, at 10:30 A.M., for furnishing and erecting in place complete and ready for use at the North Point Pumping Station of the Milwaukee Water Works, on the shore of Lake Michigan near the end of North Avenue, in the First Ward in the City of Milwaukee, one 20,000,000 gallon pumping engine, according to specifications on file in this office.

DELIVERY

Work to be completed within one year from the date of the award of the contract, failing in which the contractor shall pay to the City of Milwaukee as liquidated damages the sum of $1125.00 per day for each and every day's delay in completing the contract.

BONDS

Bonds to accompany bids required in the penal sum of Sixty-Seven Thousand and Five Hundred ($67,500.00) Dollars or in lieu thereof the bidder may deposit with the Central Board of Purchases the sum of Thirty-Three Thousand Seven Hundred and Fifty ($33,750.00) Dollars, in money or duly certified bank checks, drawn to the order of the Central Board of Purchases, failing in which his bid will be rejected. In case bonds are submitted with bids, local bondsmen or a surety company authorized to do business in Wisconsin will be required, said bonds to be approved as to form and execution by the City Attorney before being presented with bid.

All moneys and checks deposited will be returned to unsuccessful bidder when the contract is awarded and to the successful bidder when contract is entered into.

The Central Board of Purchases reserves the right to reject any or all bids.

Signed WM. R. CALLAHAN,
Purchasing Agent.
DANIEL W. HOAN,
Chairman,
Central Board of Purchases.
Countersigned A. P. PULICKER,
Deputy Comptroller.

Bids: July 1.

Street Improvement

PARK STREET IMPROVEMENT

Ridgefield Park, N. J.

Sealed proposals for the improvement of Park Street in the Village of Ridgefield Park, N. J., will be received by the Board of Commissioners of said village at the Municipal Building, 234 Main Street, Ridgefield Park, N. J., on Tuesday, July 1st, 1919, at the hour of 9 o'clock P.M. ONLY.

Plans, specifications, profiles, details and instructions to bidders and approximate quantities are on file with the Village Clerk at the Municipal Building and may be examined any day except Saturday, between the hours of 10 A.M. and 4 P.M.

BOARD OF COMMISSIONERS OF THE VILLAGE OF RIDGEFIELD PARK, N. J.
By M. D. STARKER,

PROPOSALS FOR COAL.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 o'clock, noon, July 24, 1919, and then opened, for furnishing 5000 short tons coal for U. S. dredges on St. Johns River and tributary waters. Information on application.

Bids: July 1.

Boiler Stokers, Etc.

Central Islip, N. Y.

Sealed proposals for New Boiler, Stokers, etc., and Coal and Ash Handling Equipment, New Central Heating and Lighting Plant, Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuesday, July 1, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, seled and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance wit hthe terms of specifications Nos. 3276 and 3277. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Central Islip State Hospital, Central Islip, New York; at the New York Office of the Department of Architecture, Room 618, Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. F. Pilcher, Capitol, Albany, N. Y.

Dated: June 10, 1919.

Bids: July 8.

Macadam Road

WASHINGTON COUNTY ROAD DISTRICT NUMBER TWO

Fayetteville, Ark.

Sealed bids will be received at the office of the Secretary, W. J. Reynolds, at Fayetteville, Arkansas, until 2 P.M., July 8, 1919, and there will be publicly opened and read, for the construction of 52 miles of gravel and limestone macadam road.

The approximate quantities are as follows:

11.5 acres clearing and grubbing.

155,282.00 cu.yd. unclassified excavation.

5000 cu.yd. solid rock excavation.

20 miles grading machine work (on old road.)

735 lin.ft. heavy steel bridges.

760 lin.ft. light steel bridges (short span.)

33,752 cu.yd. field stone base, 0 to 1 mile haul.

15,860 cu.yd. native gravel, 1 to 2 miles haul.

16,138 cu.yd. limestone top course, 1 to 2 mile haul.

10,800 cu.yd. native gravel, 1 to 2 mile haul.

943 cu.yd. concrete, reinforced.

297 cu.yd. concrete, plain.

72 lin.ft. 15 in. concrete pipe, hauling and placing.

696 lin.ft. 18-in. concrete pipe, hauling and placing.

24 lin.ft. 21-in. concrete pipe, hauling and placing.

528 lin.ft. 24-in. concrete pipe, hauling and placing.

648 lin.ft. 30-in. concrete pipe, hauling and placing.

20,000 sq.yd. scarifying and reshaping old macadam.

24,794 sq.yd. bituminous macadam, 2 inch top.

Separate bids may be submitted for any one or all of the following items:

Concrete pipe, F.O.B. cars, Fayetteville, Ark.

Steel trusses and short spans, erected Bituminous top.

Plans and specifications are on file at the office of the State Highway Department, Little Rock, Ark., and the office of the County Judge, B. F. Campbell, Fayetteville, Ark. Any additional information may be obtained from the Engineers, Hamilton and Shreve, Fayetteville, Ark.

A certified check to the amount of 5 per cent of the bid must accompany all proposals. Check to be made to the order of W. J. Reynolds, Secretary of the District. Usual rights reserved.

Successful bidders will be required to execute construction bond to the amount of 25 per cent. of their bids.

BOARD OF ROAD DISTRICT NO. 2
C. W. APPLEBY, President.
W. J. REYNOLDS, Secretary.
Fayetteville, Ark.

Hamilton and Shreve, Engineers, Fayetteville, Ark.

Bids: July 15.

Constructing Drainage Project

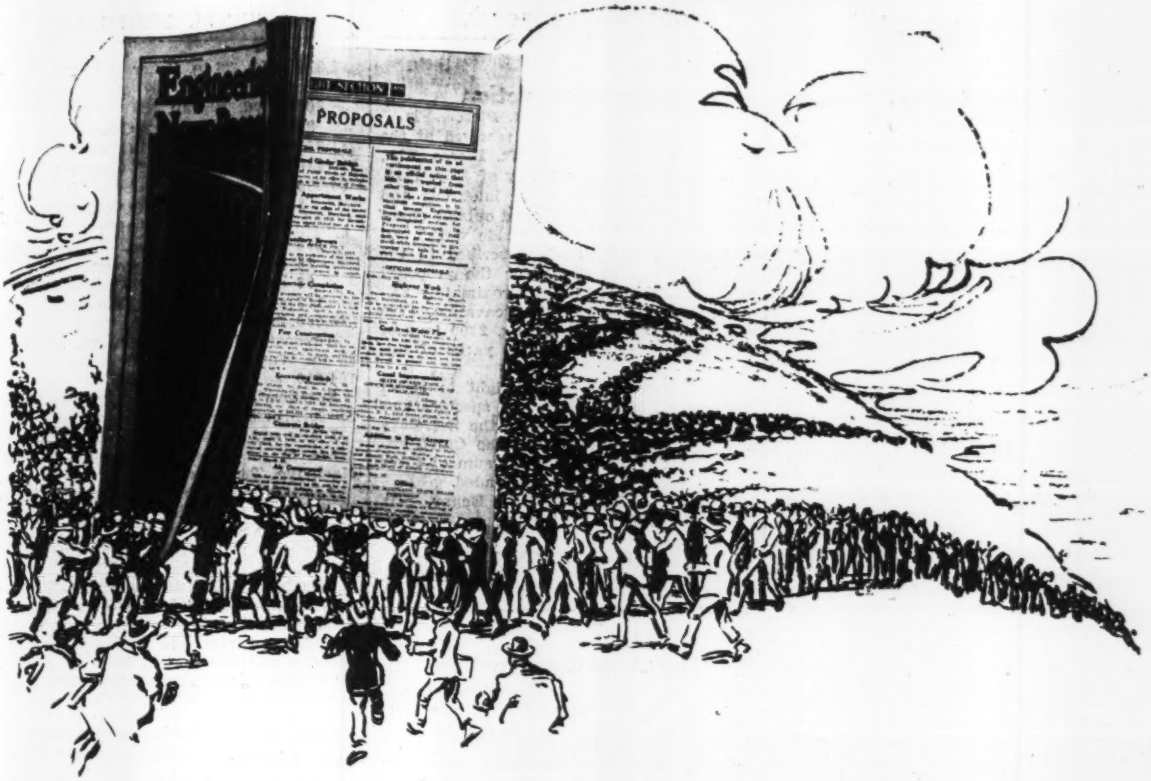
Marshall County, Iowa.

To whom it may concern: The Board of Supervisors of Marshall County, Iowa, will receive sealed bids for the construction, in accordance with the plans, drawings and specifications of the engineer, of the Iowa River Drainage Project located in Bangor, Marietta, Linn, Liscomb, Iowa and Taylor Townships, Marshall County, Iowa, said improvement being embraced wholly within one section.

The improvement will be the straightening, widening, deepening and changing of the channel of the Iowa River within the district as laid out by the engineer. Estimated yardage, 1,400,000. The work shall consist of all the necessary labor and material for the improvement. For further details see plans, profiles and specifications now on file in the office of the County Auditor, Marshall County, Iowa. Plans, profiles and specifications may be obtained from F. B. Ingersoll, Marshalltown, Iowa, engineer in charge, by sending deposit of $5.00, said amount to be returned when plans, profiles and specifications are returned.

Bids must be accompanied by a certified check of Ten Thousand Dollars ($10,000). check to be drawn on some Marshalltown bank. Successful bidder must furnish bond of 25% of contract price. Work must commence as soon as contract is entered into and be finished by January 1, 1922. Payments to be made on monthly estimates of the engineer, 20% reserved until final completion. Bids received up to 2 o'clock, P.M., July 15, 1919, at the office of the County Auditor, Marshalltown, Iowa. The Board of Supervisors reserves the right to reject any or all bids.

THE BOARD OF SUPERVISORS MARSHALL COUNTY, IOWA,
By W. H. JONES, Chairman.
GEO. ENDERLEY, County Auditor.



Worth While Bidders Know Where to Look for Public Works Contracts

Contractors, Manufacturers and Dealers all over the country *know* that the Official Proposal Advertising in Engineering News-Record is the best place to look for contracts of every description. They *know* that over 90% of the advertisements on which widespread competition is desired are published in the News-Record—over 3,000 Official Proposal advertisements annually. And that is why proposal advertising in the News-Record has saved many municipalities thousands of dollars—competitive bidders everywhere are on the lookout for this advertising and are ready to keep their prices down to the lowest figure possible. The nation-wide circulation of Engineering News-Record and the large number of announcements published each issue is what makes it

for Official Proposals

The DOMINANT Paper

OFFICIAL PROPOSALS

Bids: **July 9.**

Storm Water Lateral Sewers

Dearborn, Michigan.

Sealed bids will be received at the office of the Village Clerk, Dearborn, Mich., up to 8 P.M. of the 9th day of July, 1919, for furnishing all materials and labor to construct the following amounts of sewers:

12,068	ft. of 12-in. sewer.
8,840	ft. of 15-in. sewer.
2,933	ft. of 18-in. sewer.
1,343	ft. of 20-in. sewer.
428	ft. of 22-in. sewer.
1,708	ft. of 24-in. sewer.
1,098	ft. of 30-in. sewer.
660	ft. of 36-in. sewer.

85 manholes, all in accordance with the plans and specifications on file at the office of the Village Clerk and in the office of C. W. Hubbell Consulting Engineer, 2348 Penobscot Bldg., Detroit, Mich., from whom copies may be obtained upon deposit of $10.00, which amount will be refunded upon the return of the plans and specifications in good condition within 10 days after opening bids.

No bids will be received unless accompanied by a certified check for the sum of $7500.00 payable to the Village of Dearborn, to insure the signing of contract and the furnishing of proper and acceptable bonds for the full amount of the contract price within ten days from time of notification of the award of contract.

The right is reserved to reject any or all bids.

By order of the Village Commission.

FRED C. REAMER,
Village Clerk.

Bids: **July 23.**

School Building

Lorain, Ohio.

The Board of Education, Lorain, Ohio, will receive sealed proposals for the furnishing of all material and doing all the work necessary for the construction of a School Building, as per plans and specifications prepared by the architects, Perkins, Fellows and Hamilton, 814 Tower Court, Chicago, Ill., until 12 o'clock, noon, July 23, 1919.

Proposals must be made on blanks furnished by the Board of Education, which can be secured from the architects, must be accompanied by certified check in a sum equal to at least five (5) per cent of the amount of the bid and payable to the Board of Education, Lorain, O.

The Board reserves the right to reject any, part of any or all bids or proposals.

By order of the Board of Education, June 21, 1919.

E. BRUELL, Clerk.

Bids: **July 8.**

Paving

Cushing, Okla.

Bids will be received until 8 P.M., July 8, 1919, by C. H. Acklin, City Clerk, for 20,000 sq.yds. of brick paving together with necessary storm sewers, grading, curbing, etc.

CLARENCE A. WOOD,
Engineer.

SEALED PROPOSALS will be opened by the Lighthouse Supt., Philadelphia, Pa., 2 o'clock P.M., July 7, 1919, for furnishing fabricated steel for a 72 foot steel tower, delivered to Horseshoe Range, West Group Lighthouse, Pa. Information upon application to the above Supt.

Bids: **July 30.**

Inlet Construction

Ft. Pierce, Fla.

Sealed proposals will be received at the office of the Secretary at Ft. Pierce, Fla., until 2 P.M. on the 30th day of July, 1919, for the construction of an inlet cut and riprapping (inside work), and outside channel and certain jetties (outside work), all of which is particularly described in the plans and specifications for the proposed work, which consists of approximately 85,000 cubic yards of earth excavation, 1720 cubic yards of jetty hearting, 2200 tons of jetty capping and 1200 cubic yards of riprap.

The Board reserves the right to reject any and all bids. Plans and specifications may be seen at the office of the Secretary and may be obtained from the Chief Engineer of the District for the sum of three dollars, which will not be refunded.

MILLER HALLOWES, Chief Engnr.
Ft. Pierce Inlet District,
Ft. Pierce, Fla.

C. M. HORTON, Secretary,
Ft. Pierce, Fla.

Bids: **July 10.**

Highway Construction

Nashville, Tenn.

Sealed bids will be received by the State of Tennessee, Department of Highways, at the Office of the Department, No. 327 7th Ave., N. Nashville, Tennessee, Thursday, July 10, 1919, for the construction of 10.66 miles of State Highway No. 7, between Cowan Station and the Franklin-Marion County line, in Franklin County; and for the construction of 12.27 miles of State Highway No. 7 between Shelbyville and the Moore-Coffee County line, in Bedford and Moore Counties.

Bids will be opened publicly at 2 P.M. at the place and on the date above mentioned.

The principal items of construction, in Franklin County, are approximately as follows:

16,812	cu.yd. Common Excavation.
1,500	cu.yd. Solid Rock Excavation.
101,750	sq.yd. Waterbound Macadam, 8 in. in depth, 16 ft. wide.
8,533	sq.yd. Scarifying and Reshaping.
140	lin.ft. 15 in. Concrete or corrugated metal pipe.
60	lin.ft. 18 in. Concrete or corrugated metal pipe
320	lin.ft. 24 in. Concrete or corrugated metal pipe.
61	cu.yd. Class "A" Concrete.
53	cu.yd. Class "B" Concrete.
8,600	lb. Reinforcing Steel.
120	cu.yd. Stone Masonry.

In addition to the above excavation there is also an item of approximately 8500 cu.yd. of excavation between Sta. 0/00 and Sta. 300 covering the finishing of the grade between those two points, the rough grade having been previously done.

The principal items of construction, in Bedford and Moore Counties, are approximately as follows:

29,716	cu.yd. Common Excavation.
5,935	cu.yd. Solid Rock Excavation.
1.76	miles Grader Work.
17,865	sq.yd. Scarifying and Reshaping.
12,000	sq.yd. 8½ in. Waterbound Macadam, 16 ft. wide.
102,500	sq.yd. 8 in. Gravel Surfacing, 16 ft. wide.
596	lin.ft. 15 in. Concrete or Corrugated metal pipe.
1,075	lin.ft. 25 in. Concrete or Corrugated metal pipe.
300	cu.yd. Riprap.
28	cu.yd. "Special" Concrete.
335	cu.yd. Class "A" Concrete.
110	cu.yd. Class "B" Concrete.
36,500	lb. Steel.
2	REINFORCED CONCRETE BRIDGES, consisting of
160	cu.yd. Excavation.
15	cu.yd. "Special" Concrete.
97	cu.yd. Class "A" Concrete.
173	cu.yd. Class "B" Concrete.
15,000	lb. Steel.

Alternate bids will also be considered on 8½ in. Waterbound Macadam for the total 104,500 sq.yd. of surfacing.

Specifications and blank proposals will be furnished contractors upon application.

Plans and specifications are on file in the office of the Department of Highways, Nashville, Tennessee.

Any additional information may be secured from the Chief Engineer, at Nashville, Tennessee.

The right to reject any or all bids is reserved.

Certified check for the sum of $500.00 must accompany each bid as evidence of good faith and as a guarantee that if awarded contract, the bidder will execute contract and give surety bond as required.

STATE HIGHWAY COMMISSION,
W. P. MOORE, Chief Engineer.

Bids: **July 1.**

Grading and Draining Road

Lewisburg, W. Va.

Until noon, July 1st, sealed bids will be received by the County Court of Greenbrier County, West Virginia, for grading and draining proposed road leading from Ronceverte, west to the Fort Spring District line, or so much thereof as funds available will permit. $70,000 has been appropriated.

The bulk of this work is on a new location with which traffic will not interfere.

Plans and specifications will be supplied to applicants sufficiently interested to look over the work.

The County Court reserves the right to reject any and all bids.

FRANK K. RADER,
County Engineer.

Bids: July 7.

Street Repairing

Woodstown, N. J.

Notice is hereby given that sealed bids will be received by the Mayor and Common Council for the repair of streets in the Borough of Woodstown, with a seal coat surface upon a repaired bituminous concrete foundation; estimated amount of surface pavement required is 27,475 square yards; at Council Chamber, Woodstown, N. J., on Monday, July 7th, 1919, at 7.30 P.M.

Drawings, specifications and further information in regard to bids may be obtained of Keasbey & Sparks, Engineers, Mecum Bldg., Salem, N. J.

WALTER SYLVESTER, Clerk.

PROPOSAL FOR STONE.—U. S. Engineer Office, Customhouse, New Orleans, La. —Sealed proposals will be received here until 11 A.M., July 15, 1919, and then opened, for furnishing and delivering stone for Head of Passes, South Pass, and Southwest Pass, Mississippi River. Further information on application.

Bids: July 28.

Sewer Construction

Aberdeen, South Dakota.

Notice is hereby given that sealed bids will be received by the Auditor of the City of Aberdeen, South Dakota, until 9 o'clock A.M. on Monday, July 28, 1919, for the furnishing of material and labor and constructing a storm sewer for the City of Aberdeen, South Dakota, at which meeting of the Board of Commissioners of said city all proposals will be opened.

All material and work must be in accordance with the plans and specifications on file at the office of the city engineer and city auditor.

The work to consist of approximately eight miles of vitrified, segmental block or concrete pipe running in diameter from ten inch to ninety-six inches, with one hundred manholes and two hundred and twelve catch basins.

Any prospective bidder, desiring a set of the plans for personal use may obtain same from the city engineer by making a deposit of Ten Dollars to cover the cost of the blue prints. Refund of one-half the amount deposited will be made on the return of the plans and specifications to the city engineer within five days following date of receiving bids.

Each bid must be accompanied by a certified check, payable to the City of Aberdeen, in the amount of One Thousand Dollars. Said check will be returned to unsuccessful bidders upon award of contract and to successful bidder when his bond has been approved for the faithful performance of the work.

The city reserves the right to reject any or all bids.

By order of the Board of Commissioners of the City of Aberdeen.

F. U. RAYMOND,
City Auditor.

PROPOSALS FOR JETTY CONSTRUCTION.—U. S. Engineer Office, Jacksonville, Fla.—Sealed proposals will be received here until 12 M., July 24, 1919, and then opened, for jetty construction at the entrance to St. Johns River, Fla. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Philadelphia, Pa. Sealed proposals will be received here until 12 noon, July 25, 1919, and then opened, for dredging in Schuylkill River. Further information on application.

PROPOSALS FOR COAL.—U. S. Engineer Office, Jacksonville, Fla.—Selaed proposals will be received here until 12 o'clock noon, July 24, 1919, and then opened, for furnishing 6000 short tons coal for U. S. dredges on Hillsboro Bay and tributary waters. Information on application.

PROPOSALS FOR DREDGING, U. S. Engineer Office, Baltimore, Md. Sealed proposals will be received here until 1:00 P.M., July 21, 1919, and then opened, for dredging in channel to Curtis Bay, Md. Further information on application.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Honolulu, Hawaii.—Sealed proposals for dredging in Honolulu Harbor, Hawaii, will be received in this office until 11 A.M., August 26, 1919, and then opened. Further information on application to this office or to U. S. Engineer Office, 401 Customhouse, San Francisco.

U. S. ENGINEER OFFICE, P. O. BUILDING, Savannah, Ga.—Sealed proposals will be received here until 12 noon July 21, 1919, and then opened, for dredging in Savannah Harbor. Information on application.

Bids: July 30.

Hetch Hetchy Dam

San Francisco, California.

Sealed proposals will be received at the office of the Board of Public Works, City Hall, San Francisco, between 2 and 3 o'clock P.M., Wednesday, July 30, 1919, for the construction of the Hetch Hetchy dam and appurtenant works, in Tuolumne County, California.

The dam is to be of the arched gravity type, with a height above stream level of about 212 feet and an average depth to foundation of about 72 feet, and built of cyclopean masonry. The principal items of the work are estimated as follows: Excavation below stream level, 77,000 cu.yds.; excavation above stream level, 60,500 cu.yds.; cyclopean masonry, 298,800 cu.yds.; concrete not included in cyclopean masonry, 66,850 cu.yds. The dam site is accessible directly by railroad, and electric power for construction purposes will be available.

It is estimated that the cost to the City of this work will be about $4,000,000.

Specifications, plans and proposal form may be obtained from the City Engineer, City Hall, San Francisco, on deposit of $20.

M. M. O'SHAUGHNESSY,
City Engineer.

Bids: July 17.

Construction, Sanitary Work, Etc.

Malone, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Addition to State Armory, Malone, N. Y., will be received by Mr. Edward S. Walsh, Superintendent of Public Works, Capitol, Albany, N. Y., until 12 o'clock noon of Thursday, July 17, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the Superintendent of Public Works, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3251, 3266, 3267 and 3268. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the State Armory, Malone, N. Y.; at the office of the State Board of Armory Commissioners, 158 State St., Albany, N. Y.; at the office of the Superintendent of Public Works, Capitol, Albany, N. Y.; at the New York Office of the Department of Architecture, Room 618 Hall of Records Building, and at the Departemnt of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Public Works, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of Edward S. Walsh, Superintendent of Public Works, Capitol, Albany, N. Y.

Dated: June 19, 1919.

U. S. ENGINEER OFFICE, Room 812, Army Building, 39 Whitehall Street, New York City.—Sealed proposals will be received here until 12 M., July 21, 1919, and then opened, for dredging in Passaic River, N. J. Further information on application.

Bids: July 11.

Sewage Disposal Plant

DIVISION I
SANITARY DISTRICT OF
INDIANAPOLIS

Indianapolis, Ind.

Sealed proposals will be received at the office of the Board of Sanitary Commissioners of the Sanitary District of Indianapolis, at the City Hall, Indianapolis, Indiana, until 10 A.M., July 11, 1919, when bids will be publicly opened and schedules, and contract awarded as soon thereafter as possible, for the construction of Division 1 of the Sewage Disposal Plant for the Sanitnary District, which shall consist of 960 lineal feet of 84-inch Reinforced Concrete Intercepting Connecting Conduit, and 300 feet of 75-inch Reinforced Concrete Sewer Extenesion; Reinforced Concrete Grit Chambers and Overflow, one small Pump House, superstructure of brick, one 4-inch electric driven Drain Pump, Piping and Valves, seven Sluice Gates, Roughing Racks and Guard Racks with complete equipment; 1000 lineal feet of 60-inch Class A Cast-Iron Inverted Siphon under the river, and 7600 lineal feet of 78-inch Reinforced Concrete Sanitary Conduit. Detailed plans, drawings and specifications are on file at the office of the Board.

Proposal blanks and copies of specifications and plans may be obtained at the office of Charles H. Hurd, Consulting Engineer, 1405 Merchants Bank Building, Indianapolis. A charge of $10.00 will be made for each complete set of plans and specifications, which will be refunded upon their return in good condition.

Each bidder shall be required to deposit with the Board of Sanitary Commissioners with his respective bid, a certified check payable to the Sanitary District of Indianapolis, in the amount of ten thousand dollars ($10,000) to insure the execution of the contract for which such bid is made.

The Board has the right to reject any and all bids.

FRANK C. LINGENFELTER,
President.
LUCIUS B. SWIFT,
Vice-Pres.
JAY A. CRAVEN,
Secretary.

Bids:

Bridge Construction

County of Camden, N. J.

Sealed proposals are invited for building a new reinforced concrete arch bridge on Nicholson Road over Newton Creek in the County of Camden, N. J., in accordance with plans and specifications on file in the office of the Clerk Board of Chosen Freeholders, Court House in Camden, N. J., and which will be mailed to any address on receipt of One Dollar.

Approximate quantities.

1400 cubic yards concrete.
292 piles (12-in.) 25 ft. long.
6000 cubic yards earth fill.
712 square yards amiesite road with concrete base.

Bids will be received, immediately opened and publicly read in the Freeholders' Room in Court House, Camden, N. J., Monday, July 7, 1919, at 11 A.M. The Board reserves right to reject any or all bids.

FRED W. GERCKE,
Chairman Bridge Committee.
J. J. ALBERTSON, County Engineer.
Dated June 19, 1919.

OFFICIAL PROPOSALS

Bids: June 30.

Storm Sewer

Raton, New Mexico.

Sealed proposals will be received at the office of the City Clerk of the City of Raton, New Mexico, until 8 o'clock P.M., June 30, 1919, for the construction of a storm sewer in Sewer District No. 3.

Approximate quantities: 1062 ft. 10 in. vitrified sewer pipe, 1936 ft. 12 in., 2007 ft. 15 in., 2342 ft. 18 in., 1936 ft. 21 in., 404 ft. 30 in. concrete conduit, 400 ft. 36 in., 400 ft. 42 in., 80 ft. 48 in.; 10 catch basins and 25 manholes.

All bids must be accompanied by a certified check payable to the City Treasurer in the sum of $500.00. Plans, specifications and proposal blanks can be obtained at the office of Vincent K. Jones, Consulting Engineer, E. Las Vegas, N. M., or at the office of the City Clerk.

Monthly payments of 85% of completed work. All payments to be made in Sewer Certificates bearing 6% interest and payable in from one to ten years. No conditional or informal bid will be considered. The City reserves the right to reject any or all bids.

City Council of the City of Raton, N. M.,

By J. J. SHULER, Mayor.

Attest:

PERRY TURNER, Clerk.

Bids: July 15.

Pumping Plant

MUSCATINE-LOUISA DRAINAGE DISTRICT NO. 13

Wapello, Ia.

Sealed bids will be received until 1 o'clock P.M., July 15, 1919, by the Muscatine-Louisa Drainage District No. 13, at the Office of the County Auditor of Louisa County, Wapello, Iowa, for a steam-driven pumping plant containing one 36-in. and one 24-in. double suction centrifugal pump. Bids will also be received for a building to house this plant.

For further information address the Engineers, Elliott & Harman Engineering Co., Peoria, Illinois.

Bids: July 14.

Highway Construction

Ebensburg, Pa.

Sealed proposals addressed to the supervisors of Croyle township, Cambria County, Pa., in care of the country controller, Abensburg, Pa., will be received up until 10 a.m., and publicly opened and read in the commissioners' office at 10:30 a.m. on the 14th day of July, A.D., 1919, for the furnishing of all labor and materials for the reconstruction of 10¾ miles of highway in Croyle township, Cambria County, Pa., with a 16 foot roadway of vitrified brick paving block on a combination base and curb.

The work is in three contracts, viz.: (1) Jackson road from Summerhill borough line to the Cambria township line, a distance of 3.35 miles; (2) The Frankstown road from Lambs bridge to the Summerhill township line, a distance of four miles. (3) The Perkins hill road from the village of Lovett to the Summerhill township line, a distance of 2.9 miles.

Proposals must be made in accordance with the plans and specifications and on the blank forms furnshed by the engineer, which are part of the specifications.

Plans and specifications are on file and may be secured from O. P. Thomas, engineer for Croyle township, Leader building, Johnstown, Pa. A deposit of $10 will be required which will be refunded when specifications are returned in good condition. Contractors desiring plans will be furnished same for the cost of blue-printing.

Each proposal must be accompanied by a certified check on a basis of $500 per mile of work, which will be returned to the unsuccessful bidders on the day of the letting and to the successful bidder after the contract is properly executed and the required indemnity bond furnished and approved by the board of supervisors and county commissioners, amount of which must be equal to the gross amount of the contract.

The supervisors reserve the right to reject any or all bids to waive defects or accept any bid they may deem for the best interest of the township.

At the same time separate bids will be received for approximately 1,200,000 No. 1 repressed vitrified paving block, delivered f.o.b. cars. Summerhill, Pa.; 1,500,000. No. 1 repressed vitrified paving block delivered, f.o.b. cars Lambs bridge and Summerhill, Pa., and 1,050,000 No. 1 repressed f.o.b. cars, Lovett, Pa.

Plans, specification and bidding blanks will be ready for inspection and distribution to contractors on Thursday, July 3.

By order of Charles Stutzman, Stephen Haddon and D. G. Knepper, supervisors of Croyle township, Cambria County, Pa.

O. P. THOMAS, Engineer.

Bids: July 29.

Construction, Sanitary Work, Etc.

Utica, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work, Building for Chronic Patients (Male); Building for Chronic Patients (Female); Building for Acute Patients, Utica State Hospital (Marcy Division), Utica, N. Y., will be received by the tSate Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock P.M., on Tuesday, July 29, 1919, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be acompanied by a certified check in the sum of five per cent. (5%) of the amount of the proposal. The contractors to whom the awars are made shall be required to furnish surety company bond in the sum of fifty per cent(50%) of the amount of the contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 3271, 3272, 3273, 3274, and 3275. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Utica State Hospital, Utica, New York; at the New York office of the Department of Architecture, Room 618 Hall of Records Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, L. P. Pilcher, Capitol, Albany, N. Y.

Dated: June 18, 1919.

E. S. ELWOOD,

Secretary, State Hospital Commission.

PROPOSALS FOR DREDGING.—U. S. Engineer Office, Sault Ste. Marie, Mich.—Sealed proposals will be received here until 4 P.M., July 22, 1919, and then opened, for dredging Grosse Pointe Channel, Lake St. Clair, Michigan. Further information on application.

OFFICIAL PROPOSALS

Bridge Construction

ROUMANIAN GOVERNMENT

Roumania.

Proposals will be considered by the undersigned for submittal to the Roumanian Government for the furnishing and erection of all or part of the bridges destroyed in Roumania during the war. The total of steel needed for these bridges is about 25,000 tons, the largest and most urgent of these being the bridge across the Borcea branch of the Danube.

As arrangements for the cash payment for this work are not at present concluded, negotiations with firms capable of at least temporarily financing contracts are for the present most desired.

Arrange interview by amil.

ROUMANIAN BRIDGE COMMISSION,
Hotel Cumberland,
54th Street and Broadway,
New York.

Bids: July 7.

Paving

Bay City, Michigan.

Bids will be received Monday, July 7th 1919, at 9 o'clock A.M., for constructing 24,500 yards of permanent pavements, including asphalt, concrete and brick.

WM. H. REID.
Comptroller.

Proposal Advertisements

can be received at our New York office until

10 A. M. Wednesday

for publication in the issue of Engineering News-Record out the

Next Morning

When there is any doubt as to copy reaching us by mail by Wednesday morning, telegraph both copy and instructions as a

Night Letter

forwarding confirmation, copy and order by mail.

ENGINEERING NEWS-RECORD

10th Ave. at 36th St., New York

OFFICIAL PROPOSALS

Bids: **July 10.**

Sewer Construction

OFFICIAL NOTICE NO. 43

Milwaukee, Wis.

Published by authority of the Sewerage Commission of the City of Milwaukee.

Sealed proposals for the construction of extensions to the Intercepting Sewer System of the City of Milwaukee, Wisconsin, will be received by the Sewerage Commission of said City at its offices in the City Hall until 2:00 P.M., the 10th day of July, A.D. 1919, at which time and place during the session of the said Commission the proposals will be publicly opened and read.

The work to be done embraces the building of approximately the following work:

6200	lineal feet 72 in. concrete sewer in tunnel.
430	vertical feet of standard manholes.
60	vertical feet of drop manholes.
8	manhole frames and covers.

Together with all other appurtenances.

The time allowed for the completion of this contract will be twelve (12) months from the date of the engineer's notice to begin work.

The liquidated damages for not completing the work within the time above stated shall, for each day in excess thereof, be Twenty-five ($25.00) Dollars.

Each proposal submitted must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a National or State Bank or Trust Company, and to the order of the "Sewerage Commission of the City of Milwaukee" to the amount of Five Thousand Dollars ($5,000.00).

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned, upon application to the Secretary of the Sewerage Commission, after the contract has been awarded or after the rejection of all bids. The cash deposit or certified check which has been deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and the Sewerage Commission.

Specifications and blank forms of proposals can be obtained, and detailed plans examined, at the office of the Sewerage Commission in the City Hall and a full set of plans will be sent to any contractor upon receipt of Five Dollars ($5.00). This sum will be returned upon surrender of the plans in good condition. The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES,
Secretary.

Countersigned:
A. P. **PUELICHER, Deputy Comptroller.**

OFFICIAL PROPOSALS

Bids: July 9.

Street Paving

Palmerton, Penna.

Sealed proposals will be received by the Secretary of the Borough of Palmerton, Carbon County, Pennsylvania, at No. 180 Delaware Ave., Palmerton, Penna., until 9 P.M. July 9th, 1919, for Street Improvements.

The work will consist of approximately:

12,830	cu.yd. Excavation for Roadway and Curbing.
30,260	sq.yd. of Broken Stone Sub-Base for all types of Pavement.
30,260	sq.yd. of Cement Concrete Base Course for Brick and Amiesite Pavement.
30,260	sq.yd. of Concrete, Brick and Amiesite Pavement.
740	lin.ft. Removal and Renewal of Old Curbing.
2,890	lin.ft. of Concrete Curbing.

Proposals must be marked "Proposals for Street Improvement."

All proposals must be upon blank forms provided by the Borough Council.

Plans, specifications and proposal forms can be procured from the Borough Council through the Borough Engineer at the office of the Palmer Land Co. Cor. Third and Delaware Ave., Palemrton, Penna., upon deposit of ten (10) dollars, which amount will be refunded upon their return in good condition not later than ten (10) days following the award of the contract.

Each bid must be accompanied by a certified check for $5000.00 as evidence of good faith.

The right is reserved to reject any or all bids.

BOROUGH OF PALMERTON,
A. C. SCHAEFER, Secretary.

Bids: July 8.

Concrete Girder Bridge

COUNTY CONTROLLER'S OFFICE

Reading, Penn.

Sealed proposals will be received in this office up to 10 o'clock A.M. Tuesday, July 8, 1919, for the erection of a reinforced concrete girder bridge across West Branch Creek in Washington Township, Berks County, Penn., about two miles from Barto Station. Material must be shipped on the P. & R. railroad.

Proposal blanks with plans and specifications can be obtained in the County Commissioners' Office by paying a deposit of five dollars, which will be refunded when the plans and specifications are returned.

All bids must be accompanied with a certified check equal to ten per cent of the aggregate amount of the bid.

The right is reserved to reject any or all bids.

CYRUS J. RHODE,
County Controller.

June 18, 1919.

OFFICIAL PROPOSALS

Bids: Sept. 30.

Bridge Construction

CONSTRUCTION OF A REINFORCED CONCRETE BRIDGE OVER THE RIO YAQUE DEL SUR ON THE ROAD FROM AZUA TO SAN JUAN

The Province of Azua, Dominican Republic.

Sealed proposals will be received at the Office of the Director General of Public Works, Santo Domingo City, Dominican Republic, until 10 o'clock A.M., September 30, 1919, for furnishing all materials and labor necessary for the CONSTRUCTION OF A REINFORCED CONCRETE BRIDGE AND APPROACHES over the Rio Yaque del Sur on the road from Azua to San Juan, in the Province of Azua, Dominican Republic. The bridge consists of two reinforced concrete arches of 91 ft. span each and four slab spans of 22 ft. each. Over all length of bridge 304 ft. 0 in. and out to out width 18 ft. 9 in.

The plans and specifications may be secured at the Office of the Director General of Public Works in Santo Domingo City, Dominican Republic, by making a deposit of Thirty Dollars ($30.00) for same, which will be returned after the award of the Contract.

Santo Domingo, Dominican Republic,
June 12, 1919.

Bids: July 14.

Road Work

Fayetteville, W. Va.

Sealed proposals will be received at the office of the Clerk of the County Court, Fayetteville, West Virginia, until July 14, 1919, for grading one section of County Highway of approximately 3.0 miles from Fayette to Lansing containing 45,000 cu.yd. of excavation. Very good shovel job.

Bids must be submitted on the blank forms contained in the book of specifications which with other information may be obtained upon application to J. K. McGrath, Road Engineer, Fayetteville, West Virginia.

A certified check of five per cent of the proposal, made payable to the order of the Sheriff of Fayette County, shall be filed with the bid. The County Court reserves the right to reject any and all bids.

J. K. McGRATH, Road Engineer.

By order of the County Court of Fayette County, West Virginia.

H. O. BOLEY, President.
R. J. STEGALL, Clerk.

S. S. JOHNSON & BRO.
312 Chestnut St., Harrisburg, Pa.
We are water works engineers. "We know how" to lay water pipe. Estimates furnished on short notice.

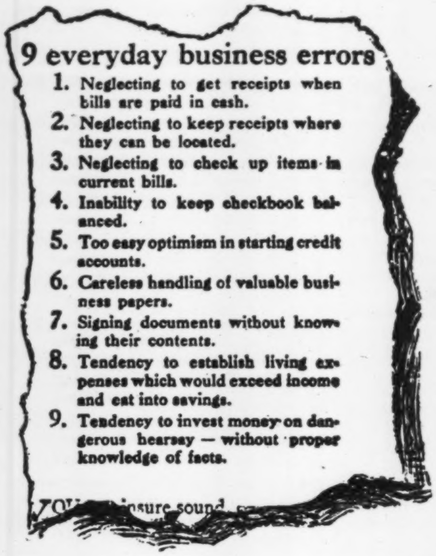
WHAT IS IT WORTH TO YOU
To know that the handling of your bonds and compensation insurance is in the hands of a specialist, an expert in your particular needs in insurance?
An Engineering Insurance Service
Swart Service Really Serves
TRY ME OUT
HARMON V. SWART
19 Liberty Street, New York

WANTED

To sub-let or will hire Machine

to do 100,000 yard contract, with 20 foot bottom, average depth of 5½ feet, a one to one slope, with 8 foot berm.

WISCONSIN DRAINAGE CO.
Elkhorn, Wisconsin.



9 everyday business errors

1. Neglecting to get receipts when bills are paid in cash.
2. Neglecting to keep receipts where they can be located.
3. Neglecting to check up items in current bills.
4. Inability to keep checkbook balanced.
5. Too easy optimism in starting credit accounts.
6. Careless handling of valuable business papers.
7. Signing documents without knowing their contents.
8. Tendency to establish living expenses which would exceed income and eat into savings.
9. Tendency to invest money on dangerous hearsay — without proper knowledge of facts.

YOU [illegible] insure sound

—The TENTH Error

This clipping from a recent newspaper advertisement, tells a valuable story. But it overlooks one of the *biggest* business errors—

Neglecting to use the

SEARCHLIGHT SECTION

It is a bad business error to overlook the opportunities that this Department puts at your disposal.

Whether you wish to buy or to sell—to secure contracts—to reach the men whose services you want or to whom you wish to sell your services

—the "Searchlight" offers you the opportunity to reach the largest possible number of your prospective customers.

0086

OFFICIAL PROPOSALS

Bids: June 30.

Sewer Construction

Muskegon, Mich.

Sealed bids will be received at the office of the City Recorder, Muskegon, Michigan, up to 8 o'clock, June 30, 1919, for the furnishing of material and the performance of the work of constructing main and lateral sewers in sewer district No. 28, which lies in the southeastern part of the City of Muskegon. Sewer will be laid in sandy soil, ground water will be encountered at a depth of ten (10) to fourteen (14) feet.

5,461 lin.ft. 24-in. D.S. Sewer Tile, maximum cut 16 ft., average cut 10 to 14 ft.
2,242 lin.ft. 20-in., average cut 12 ft.
1,106 ft. 18-in., average cut 12 ft.
2,562 ft. of 15 in.
2,148 ft. of 12 in.
2,282 ft. of 10 in.
31,521 ft. of 8 in.
61 Manholes.
13 "Y" Branches on the 24-in. pipe.

On the 8-in. there will be a "Y" Branch about every 25 ft.

Lamp holes without cast iron covers will be provided on the end of each lateral.

Plans and Specifications of the same are on file in the office of the City Engineer.

Each bidder will be required to deposit with his bid a certified check of 5% of the total amount thereof to be forfeited to the City in case he fails to enter into contract if his bid is accepted.

The city reserves the right to reject any and all bids.

B. H. TELLMAN,
City Recorder.

Bids: June 30.

Street Improvement

Raton, New Mexico.

Separate, sealed proposals for the paving and improving of the following streets within the City of Raton, New Mexico, will be received at the office of the City Clerk until 8 o'clock P.M., June 30: Cook Avenue from First to Third Streets; Park Avenue from First to Third Streets; First Street from Rio Grande to Savage Avenue; Second Street from Rio Grande to Savage Avenues. All proposals must be upon blanks furnished by the City and must be accompanied by a certified check in the sum of $1,000.00 payable to the City Treasurer. Approximate quantities are as follows: Topeka of Bitulithic Pavement, 26,887 sq.yd.; Concrete Curb and Gutter, 6661 lin.ft.; Concrete Alley Returns, 546 lin.ft.; Concrete Alley Pavement, 4000 sq.yd., which is approximately one-half of a two-year program which has been authorized. Alternate bids will be received based upon the acceptance, at par, for all work, of certificates bearing 6% interest and certificates bearing 8% interest. Payments will be made in assessment certificates upon the completion of each separate street improvement. Plans can be seen and forms of proposal obtained at the office of Vincent K. Jones, Consulting Engineer, E. Las Vegas, N. M., or at the office of the City Clerk. No informal or conditional bid will be considered. The right is reserved to reject any or all bids.

City Council of the City of Raton, N. M.,
By J. J. SHULER, Mayor.
Attest:
PERRY TURNER, Clerk.

OFFICIAL PROPOSALS

Bids: July 10.

Concrete Bridge Construction

Adrian, Michigan.

Notice is hereby given that sealed bids will be received by the City Clerk of the City of Adrian, Michigan, for the construction of a reinforced concrete bridge over the Raisin River, on West Maumee Street, in said City of Adrian. The plans and specifications for said concrete bridge may be seen at the office of the City Clerk where they are on file for inspection, and include by reference Michigan State Highway Department, Specifications Edition 1916. All bids must be accompanied by a certified check for the sum of $500.00 to be forfeited by the bidder in the event that he is the successful bidder and fails to carry out his contract, and in the event that his bid is not accepted, said certified check will be returned. The right is also reserved to reject any and all bids.

All bids will be opened on July 10, 1919, at 4 o'clock P.M. at the office of said City Clerk. The successful bidder will be required to furnish a construction bond in a sum not less than the amount of the bid, furnished by a Surety Bonding Company authorized to transact business in the State of Michigan, and to carry insurance covering Workmen's Compensation and public liability.

G. PERCY LOVE,
City Clerk.

Dated this 17th day of June, 1919.

POSITIONS VACANT

A FIRST-CLASS mechanical and electrical engineer wanted, capable of designing electric traveling cranes; must have executive ability and be capable of taking full charge. State experience, age, salary expected. Communications strictly confidential. Address P-810, Eng. News-Record, Philadelphia.

ARCHITECTURAL draftsman wanted—State education, experience and salary wanted; location, New York City. P-837, Eng. News-Record.

ASSISTANT superintendent or general foreman wanted on bridge work. Requirements, energy and good judgment. Address P-746, Eng. News-Record, Chicago.

DESIGNER—Reinforced concrete designer wanted; thoroughly posted on latest commercial methods of flat slab design and construction; engineering graduate preferred. The J. G. White Engineering Corporation, 43 Exchange Pl., New York.

DRAFTSMEN wanted for the Panama Canal—1 electrical draftsman experienced in underground power distribution and building illumination, $168 to $179 month; 2 hull draftsmen, $168 to $231 month; 1 draftsman capable of handling municipal engineering work, $189 month; must be thorougly experienced in special lines above indicated, American citizens under 50 years of age, in good health. Free steamship transportation from New York or New Orleans, salary beginning date of sailing. Write Chief of Office, The Panama Canal, Washington, D. C.

DRAFTSMAN wanted at once—First-class; state age, nationality, references and experience in first letter. Permanent position in central South if satisfactory. P-747, Eng. News-Record, Leader-News Bldg., Cleveland.

POSITIONS VACANT

DRAFTSMEN — First-class, experienced architectural or structural men for commercial or domestic work. Send samples of recent work with experience, salary wanted and reporting date, first letter. Permanent work under best conditions. Smith, Hinchman & Grylls, Washington Arcade, Detroit, Mich.

DRAFTSMAN wanted on construction work, New York City; technical graduate preferred; give past experience and salary desired. Address P-835, Eng. News-Record.

DRAFTSMEN and detailers wanted immediately on reinforced concrete. State experience, salary, age and nationality. P-870, Eng. News-Record.

ENGINEER-SUPERINTENDENT capable of handling any class of municipal engineering and superintending paving construction for city doing its own work; one experienced with Kentucky rock asphalt preferred; state fully experience in first letter. W. Austin Smith, Box 1206, Huntington, W. Va.

ENGINEER wanted on highway work, capable of taking charge of party in field making road surveys. F. O. Laing, County Engineer, Des Moines, Ia.

ENGINEERS wanted; one transitman and one draftsman, with some experience in highway work. Permanent employment if services satisfactory. P-216, Eng. News-Record, Chicago.

ENGINEER solicitor wanted by engineering firm to manage business-getting department; headquarters New York City; experience in manufacture of structural steel, steel products and machinery preferred; state age, nationality, experience in detail; references and salary. P-847, Eng. News-Record.

ESTIMATOR wanted for miscellaneous iron and steel work, reinforcing especially; structural and ornamental knowledge desirable. Must be qualified to take items accurately from plans. Would consider partnership with right man. Actual business good, prospects splendid. P. O. Box 487, Little Rock, Ark.

EXPERIENCED checkers and detailers on bridge and building work, at once. Location, New England. State age, nationality, experience, salary expected and when able to report in first letter. P-769, Eng. News-Record.

FIRST-CLASS, high-grade structural steel designer wanted of not less than ten years' experience, and preferably one familiar with blast furnace or steel plant work. Permanent position. State full details regarding experience, salary wanted and date available. P-575, Eng. News-Record, Leader-News Bldg., Cleveland.

FIRST-CLASS checkers and detailers wanted on mill buildings and other steel construction; state qualifications, salary expected and date available. Indiana Bridge Company, Muncie, Ind.

Structural Draftsmen Wanted

Several first-class detailers and checkers by large Buffalo fabricating shop. Permanent positions with excellent opportunities for advancement, depending upon ability. Give age, education, references and experience in detail.

P824—Engineering News-Record
10th Ave. at 36th St., New York City

Get Your Wants into the Searchlight

ADVERTISING RATES

Ads Set in Uniform Style

(Solid, in one paragraph, without display.)

THREE CENTS A WORD, minimum charge 50 cents an insertion, payable in advance, less 10 per cent. if one payment is made in advance for four continuous insertions—for advertisements under:

Positions Wanted
Evening Work Wanted
Vacation Work Wanted
Salesman Wants Connections

FIVE CENTS A WORD, minimum charge $1.50 an insertion, for advertisement under:

Agencies Wanted
Agents Wanted
Business Opportunities
Desk Room for Rent
Educational
Employment Agencies
Desk Room Wanted
Foreign Business
Positions Vacant
Partner Wanted
Representations Wanted
Salesmen Wanted
Patents for Sale
Plants for Sale
Sub-Contracts Wanted
Work Wanted
Miscellaneous for Sale, for Rent or Want Ads.

THIRTY CENTS A LINE, minimum five lines, for all undisplayed advertisements set with a paragraph for each item or tabulated.

THREE DOLLARS AND SIXTY CENTS AN INCH for advertisements for bids (Official Proposals).

Ads Set in Display Type

(Individual space, within border rules.)

Space for these advertisements is sold by the inch. Each page contains 30 inches. The rate per inch is based on the *total* number of inches to be used—that is, the number of inches the advertisement is to occupy multiplied by the number of insertions it is to receive. For instance, a 2-inch advertisement in 2 issues earns the 4-inch rate of $3.90 an inch. A 1-inch space for 4 issues, or a 4-inch space in one issue, also earn the 4-inch rate.

SCHEDULE OF RATES

1 to 3 in.,	$4.00 an in.	15 to 26 in.,	$3.70 an in.
4 to 7 in.,	3.90 an in.	27 to 49 in.,	3.60 an in.
8 to 14 in.,	3.80 an in.	50 to 99 in.,	3.50 an in.

Rates for larger space furnished on request.

For quick and satisfactory results tell the reader everything that he will want to know.

INFORMATION

ALLOW FIVE WORDS for the address, if replies are to a box number in care of any of our offices. There is no extra charge for forwarding replies

IN REPLYING TO ADS, do not enclose original testimonials or anything that you may want returned. State your experience and qualifications in as concise and neat a manner as possible and enclose copies of your testimonials.

BE CAREFUL TO PUT ON ENVELOPE, when answering any "blind" ad, the box number in the ad, the name of the paper, and also the local address of office to which reply is sent:

36th St., at 10th Ave., New York
935 Real Estate Trust Bldg., Philadelphia
657 Leader-News Bldg., Cleveland
1570 Old Colony Bldg., Chicago
501 Rialto Bldg., San Francisco

WHEN ADVERTISING MACHINERY, use your own name and address—or a local address of some kind—so that the readers can wire direct and get quick replies. We advise also that you state in your advertisement the present location of plant that is offered for sale, or point of delivery provided you are in the market for equipment.

TO SIGN YOUR NAME and address to your advertisement begets the confidence of the reader and facilitates receiving replies. You can, however, obviate delay in receiving answers by signing your ad. only with initials (your own or others), care of your home, your office or a post-office box number in your city.

EMPLOYMENT

POSITIONS VACANT **POSITIONS WANTED**

POSITIONS VACANT

GRADUATE engineer wanted — Experienced in automobile design, maintenance and repair; must have had practical shop experience on repairing at same time; give past experience and salary desired. Address P-836, Eng. News-Record.

GRADUATE engineer wanted, specialist in reinforced concrete design, with practical construction and sales experience, for position resident sales engineer, Calcutta, India. Also for Singapore, Straits Settlements. Must be unmarried and American or British born and prepared to stick. Only high-grade men wanted. Send complete details education, training, experience, references and salary requirements. Truscon Steel Co., 2 Rector St., New York City.

HEATING and ventilating engineer-draftsman wanted—Must be college graduate, neat draftsman, capable of designing hot air heating, ventilating and exhaust systems. Location eastern New York. Salary $165 per month. P-748, Eng. News-Record.

LARGE locomotive firm will shortly require the services of a thoroughly experienced works manager conversant with the best modern practice; liberal salary and exceptional prospects to suitable man. Address "Locomotive," Wm. Porteous & Co., Advertising Agents, Glasgow, Scotland.

LEVELMAN and transitmen wanted on reclamation work; state age, experience, education, nationality and salary desired; no replies to rejected applicants. Address Morgan Engineering Co., 622 Goodwyn Institute, Memphis, Tenn.

ONE experienced structural steel engineer wanted for Southwest. Permanent position. P-770, Eng. News-Record, Chicago.

MAN wanted capable of taking charge of an excavating business; one capable of making estimates and supervising work; this is an unusual opportunity for a capable man who is willing to start at a fair salary and show that he can make good. Write, giving, experience, age and salary wanted to start. P-811, Eng. News-Record.

MEN wanted familiar with valuation of railway structures, for work in the middle west. Address P-782, Eng. News-Record, Philadelphia, giving experience and salary.

REINFORCED concrete engineers of ability, conversant with latest design methods, experience with reinforcing steel concerns preferred; permanent positions, attractive future; state age, education, experience in detail, salary and when available. Truscon Steel Company, Majestic Bldg., Chicago, Ill.

SOUTHERN college desires applications for assistant professorship of drawing and surveying. Applicants must be unmarried. Salary $1500 and quarters. P-859, Eng. News-Record, Philadelphia.

STRUCTURAL steel detailers wanted; reply by mail, stating age, nationality, experience and salary expected. The George A. Just Company, Long Island City.

STRUCTURAL draftsmen wanted—Competent. Reply with full particulars as to experience, age, salary required, how soon could report and references. Lehigh Structural Steel Company, Allentown, Pa.

STRUCTURAL steel detailers wanted; state age, experience, salary expected, and date available. New England Structural Company, Everett, Mass.

TEMPLET makers — Several first-class templet makers for structural shop. Address Anthracite Bridge Co., Scranton, Penn.

THOROUGHLY experienced grade and concrete foreman wanted on county road work; no amateurs wanted. Wire Atlantic Bitulithic Company, First National Bank Bldg., Shinnstown, W. Va.

LABOR AGENCY

CONSTRUCTION laborers of all kinds supplied free of any charge to employers, provided transportation is advanced. Finn's Labor Agency, 27 Washington St., Boston, Mass. Tel. Haymarket 3256 or Haymarket 1108.

EMPLOYMENT AGENCIES

CLEVELAND Engineering Agency, Rose Building, Cleveland, wants quickly experienced engineers, draftsmen and technical men, available for executive, sales or engineering positions. Send stamp for blank and list of vacant positions.

THE Engineering Agency, now in its twenty-sixth successful year is the oldest technical employment bureau in the world for high-grade executives in engineering, construction and manufacturing. Full particulars furnished on request. Address 1662 Monadnock Bldg., Chicago, Ill.

WESTERN C. E. openings—Draftsmen desiring western locations, on highway and irrigation work, at $135 to $175 a month, communicate with the Business Men's Clearing House, Denver, Colo

DRAFTSMEN WANTED IMMEDIATELY

for work in the Wilmington Office of E. I. duPont de Nemours & Co.

Positions are now open for the following:

- **Architectural Draftsmen.**
- **Architectural Engineers with reinforced concrete and structural experience.**
- **Machine Designers.**
- **General arrangement and layout draftsmen.**
- **Structural Steel Design Draftsmen.**
- **Power Draftsmen.**
- **Map Draftsmen.**

Write to Personnel Division, E. I. duPont de Nemours & Co., DuPont Bldg., Wilmington, Delaware, giving age, detail of experience, salary desired and other important information

---

State Highway Department to Hold Examination for Assistant Engineers

In compliance with a recent law enacted by the legislature, the State Highway Department will hold an examination for Assistant Highway Engineers in the Capitol building at Nashville, Tennessee, on

JULY 7th 1919

Chapter 74 of the Public Act of 1917 requires all Assistant Engineers who are employed by the State Highway Department to have passed a creditable examination before the examining Board, consisting of the State Highway Engineer, the Dean of Engineering of the University of Tennessee and the State Geologist. The object of this examination is to qualify a number of Engineers for immediate employment. The State Highway Department is now preparing a number of projects to be passed upon by the Federal Government with an idea of immediate construction. The Department is putting forth every effort to construct the unimproved portions of the Memphis to Bristol Highway (610 miles in length) and the Dixie Highway (207 miles in length) as quickly as possible. In addition to these main trunk lines there are a number of other projects which are receiving the attention of the Department. In order to carry on this work and to prepare the various projects for construction the Department is now needing additional engineers. This examination is therefore held in order to obtain Assistant Engineers for immediate employment and not to be placed on the eligibility list to wait for future assignment. **It is thought by the Commission that the Department can use at the present time every engineer who qualifies.**

W. P. MOORE, Chief Engineer, State Highway Dept., Nashville, Tenn.

STRUCTURAL STEEL DETAILING for

Mill buildings, office buildings, tower tipples, viaducts, schools, theatres, etc.

Correctness and time of delivery of drawings guaranteed. All drawings made in accordance with your Shop Standards. We have a complete organization, which will save you money, time and worry; can refer you to twenty or more satisfied clients, covering nine years' business. The Mail makes Five Hundred Miles the same as next door.

Send us your Inquiries.

Write or wire and we will come and talk it over.

Designs for Structural Steel and Reinforced Concrete Industrial Buildings, Foundations, etc.

RAPP & DUNKEL
Fulton Bldg., Pittsburgh, Pa.

Experienced Draftsmen Wanted

for right-of-way and track maps in connection with Federal Valuation and maintenance of way. State age, nationality, experience and salary expected. Submit sample of work.

H. R. CARPENTER
Chief Engineer
Missouri Pacific Railroad, St. Louis, Mo.

EMPLOYMENT AGENCIES

Employment Service

THE undersigned provides a confidential service designed to locate openings through correspondence for men earning not less than $2,500 and up to $25,000, all lines. Not an employment agency but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, 304 Lockwood Bldg., Buffalo, N. Y.

POSITIONS WANTED

Mechanical and Electrical

ELECTRICAL engineer, specializing designing medium voltage alternating current factory installations; thoroughly experienced equipment purchaser. PW-830, Eng. News-Record.

ENGINEER, mechanical and hydro-electric, age 35, 3½ years shop, general machinery and mining, nine years hydroelectric developments (thoroughly familiar with preliminaries, projects, design, construction, inspection, testing, supervision and executive duties), with foreign and domestic business experience, speaking four languages, desires position with prominent company, work home or abroad. PW-783, Eng. News-Record, Philadelphia.

MECHANICAL, seven years' experience on steam power plant layouts, desires position where an A-1 man is required as sales engineer or in drafting room; vicinity New York City. PW-857, Eng. News-Record.

MECHANICAL consulting engineer, retired, experience waterworks pumping engineer, hydraulic and general machinery, expert draftsman and mechanic, wants employment part of the day. Salary no object. PW-623, Eng. News-Record.

Civil Engineers

A CIVIL engineering graduate; married; ex-lieutenant engineering corps with two years' experience in topographical and highway surveying, desires a permanent position in reinforced concrete dam and bridge construction. G. H. Squires, West Brattleboro, Vermont.

ARMY officer now in France, civil engineer, 15 years' extensive experience, would like to make connection with construction firm for work in France or Belgium. Speaks and writes French. PW-713, Eng. News-Record.

CIVIL engineer, 26, graduate, married, five years' general construction, valuation, factory maintenance, surveying; good draftsman and estimator; knowledge machinery, seeks connection vicinity New York City. H. Lewis, Wright Inn, Palmer, Mass.

CIVIL engineer, discharged from service, three years city engineer and county surveyor, experience in concrete construction and paving work, wishes position as field engineer or superintendent with contracting firm; 27; single. PW-823, Eng. News-Record, Chicago.

CIVIL engineer, technical education, seven years' experience sewer investigation, design and construction, pavements, municipal work; salary $250 per month. PW-845, Eng. News-Record.

CIVIL engineer, graduate, 29, married, five years' responsible experience on concrete and steel design and construction, bridges, subways and municipal improvements. Hydraulic and sanitary work preferred. PW-793, Eng. News-Record, Chicago.

CIVIL engineer, 35, married, Asso. Mem. Am. Soc., 15 years' experience railroad and building construction, unemployed, will go anywhere. Address F. S., 18 Chedell Pl., Auburn, N. Y.

POSITIONS WANTED.

CIVIL engineer, 29, graduate, unmarried, 1st Lieut. Engrs., U. S. A., five years' experience heavy concrete construction, surveys, design, estimating, etc.; six months overseas with sapper regiment, wishes engagement on reconstruction work in France with American firm; $200. PW-804, Eng. News-Record, Philadelphia.

CIVIL engineering graduate, ex-lieutenant engineers, with three years' engineering teaching experience and two years' army experience, desires position on construction or highway in Eastern states. PW-631, Eng. News-Record.

CIVIL engineer, graduate, 29, married, seven years' railroad and highway location and construction, available at once; location immaterial. Box 138, Barbourville, Ky.

CIVIL engineer, technical graduate, seven years' field and office experience, desires responsible position with engineering or contracting company. PW-734, Eng. News-Record.

CIVIL engineer, 27, university graduate, recently discharged army officer; four years' experience in field and office, surveying, drainage construction, railroad location and construction, railroad valuation, steel and concrete design; good draftsman and letterer; desires permanent position; $200; best references as to ability and character. Cyril Wakefield, c/o Friedlander, 231 West 96th St., New York City.

CIVIL engineer, 26, technical education, ex-soldier, five years' experience supervising construction subways, transmission lines, industrial plants; now office engineer highway construction; capable construction engineer, estimator and draftsman, desires connection with contracting or manufacturing company as engineer or salesman. PW-723, Eng. News-Record, Chicago.

CIVIL engineer—Princeton graduate, now assistant supervisor Penna. railroad, desires change of position. Can furnish capital for partnership, but will consider anything exceeding $40 per week. PW-666, Eng. News-Record.

POSITIONS WANTED.

CIVIL engineer with geological training, graduate, 35, with six years' experience in laying out, designing and erecting shop industrial plants, buildings, terminals, piers and bulkheads of concrete, steel and wood; have had charge of design of large undertakings; can handle men well; keep cost statistics and manage office; five years with one large contracting concern; have good training in mineralogy and geology, useful in connection with possible mineral or ore deposits in undeveloped regions; will go anywhere; ideal man for pioneer work; ready for work June 1; what is your proposition? PW-597, Eng. News-Record.

CIVIL engineer, recent graduate, Serbian, wishes position with a firm doing general steel and reinforced concrete construction; have you got your eye on foreign trade? If so, act quick; eastern location preferred. PW-817, Eng. News-Record, Chicago.

CIVIL engineer, graduate; honorably discharged lieutenant of engineers; 11 years' experience foundations, steel and concrete construction, topography. PW-820, Eng. News-Record.

American Employment Exchange

115 Broadway, New York City

We can place immediately in New York qualified Structural, Reinforced Concrete, Architectural and Mechanical Designers. Attractive salaries.

Write for information at once.

TECHNICAL DEPARTMENT

EMPLOYERS

Send us your inquiries for men of technical training and experience. We are obtaining employment for soldiers, sailors and marines released from the service.

Re-Employment Bureau of New York City for Soldiers, Sailors and Marines, 505 Pearl Street, north of Municipal Building, Professional Section. Worth 9250.

DO YOU LIVE IN

Carson City, Nev.	**Pierre, So. Dak.**
Erie, Pa.	**Sacramento, Calif.**
El Paso, Tex.	**San Francisco, Calif.**
Jackson, Miss.	**Santa Fe, N. M.**
Keokuk, Ia.	**Spokane, Wash.**
Miami, Fla.	**Winnipeg, Man.**
Montgomery, Ala.	**Worcester, Mass.**

If so, you can *make some money* by devoting an hour or so *during business hours,* to calling on engineers, contractors, etc., gathering construction reports for the construction news section of Engineering News-Record.

Write, telling all about your present work and how much time you have available, to

L. V. FLETCHER, Engineering News-Record
10th Ave. at 36th St., New York

AAE IS EVERYWHERE!

AMERICAN ASSOCIATION OF ENGINEERS
ADVANCE-CO-OPERATE
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NOW
AAE
NATIONAL HEADQUARTERS
29 S. LA SALLE ST., CHICAGO, ILL.

WRITE FOR BLANKS TODAY!

NAME ....

STREET ....

CITY ....

STATE ....

STUDY BY MAIL

Reinforced Concrete Engineering
Structural Steel Designing
Structural Drafting

Are you able to design and estimate the cost of any and all types of structures in Reinforced Concrete, Steel or Wood? And are your designs safe, economical and up to the minute? If not, WHY NOT?

Special courses of HOME STUDY have been arranged by well known engineer with 30 years' experience in this country and abroad; they are meeting a long felt want.

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M1006—Eng. News-Record, 10th Ave. at 36th St., New York, N. Y.

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CONSULTING engineer—For the selection of special motor truck equipment for municipal and engineering uses. For appointment write Captain Whittemore, 219 West 81st St., New York, N. Y.

ENGINEER with 17 years' office and construction experience, desires position with engineering or contracting firm. Technical graduate. PW-790, Eng. News-Record.

EXECUTIVE engineer, technical graduate, member of leading professional societies; 18 years' experience in construction, administration, operation, investigations, valuations and statistical research; waterworks, conservancy engineering, etc. Army experience. PW-789, Eng. News-Record.

EXECUTIVE structural and civil engineer, Member Am. Soc. C. E., technical graduate, 20 years' general experience in office and field on plant construction and equipment, good knowledge of chemistry, recently chief engineer and clerk of works for contractors on $9,000,000 chemical plant; have designed decorative structural work in steel and masonry; decreasing business will soon make change from present position desirable. PW-828, Eng. News-Record.

FIELD engineer, Asso. Mem. Am. Soc. C. E., graduate, 12 years' experience on construction of railways, municipal improvements and industrial plants; least salary $225. PW-826, Eng. News-Record, Philadelphia.

HIGHWAY engineer, first-class draftsman and letterer; 44; married; 15 years town engineer; desires engagement, preferably as highway engineer either on salary or contract basis; own two transits and complete office outfit. PW-829, Eng. News-Record.

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POSITIONS WANTED.

CIVIL engineer, experienced in design of reinforced concrete; estimator preferred. State qualifications and salary. P-809, Eng. News-Record, Philadelphia.

HIGHWAY engineer, graduate, American, 30, married; eight years' experience in highway engineering in all its branches, desires responsible position with contracting company or as division engineer; Eastern states preferred. Address PW-726, Eng. News-Record, Philadelphia.

HIGHWAY engineer, graduate C. E., age 30, married, capable and reliable, desires position as county or district engineer; six years' practical experience, roads, bridges, drainage, heavy building construction; own equipment and instruments; recently honorably discharged as construction officer; available short notice; excellent references. Give full particulars when writing. Address Engineer, Box 557, Aitkin, Minn.

INVESTIGATION and statistics; C. E. graduate with business schooling and six years' experience; a versatile, analytical organizer, age 30, seeks promising opening, preferably in California. PW-796, Eng. News-Record., Philadelphia.

REINFORCED concrete engineer, just released from service, desires responsible position in charge of concrete designing, detailing and estimating; graduate civil engineer, 31 years of age; eight years' experience in responsible charge of work. PW-839, Eng. News-Record.

STRUCTURAL steel engineer, superintendent, chief draftsman; have filled the above positions. Work executed: Highway and railway bridges, mill and office buildings, churches and cathedrals, blast and open hearth furnaces, conveyors, deckheads, etc. Fifteen years experience, age 34, American citizen, desires change. PW-739, Eng. News-Record.

TECHNICAL graduate, two years' teaching, three years' construction, highway and railroad experience, desires position as instructor iin recognized engineering school; East or Central States. PW-827, Eng. News-Record.

YOUNG civil engineer desires field or office position with construction engineer where neatness and accuracy are chief requisites. PW-841, Eng. News-Record.

Bridge and Structural

CONSTRUCTION engineer, age 34, technical graduate, 11 years' experience on design, supervision and construction of reinforced concrete commercial and industrial buildings, just released from the Construction Division of the army, desires location with engineering or contracting concern; experience in East, Middle West and Pacific Coast; strictly high-class man and highest references. PW-834, Eng. News-Record, Leader-News Bldg., Cleveland.

GRADUATE civil engineer, structural steel and reinforced concrete designer, checker and estimator; nine years' experience bridges, subways, elevated structures, dry docks and all classes of buildings, wants position in New York City. Address PW-812, Eng. News-Record.

POSITIONS WANTED

GRADUATE engineer, two years' experience in structural steel and surveys, desires position with progressive firm of engineers or contractors, preferably in vicinity of New York. PW-840, Eng. News-Record.

GRADUATE civil engineer, two years' experience on steel design and detail in office and on construction job, desires connection with structural firm in or near New York City. PW-867, Eng. News-Record.

RESPONSIBLE position wanted by engineer with technical education and ten years' experience in office and field; growing structural firm preferred; present salary $250. PW-816, Eng. News-Record, Philadelphia.

STEEL engineer, graduate structural, large experience designing, estimating and selling steel and factory buildings, desires permanent connection. Export Steel Company preferred. PW-617, Eng. News-Record.

STRUCTURAL engineer, 18 years' experience, detailing, designing, estimating and in charge of work, desires responsible position, preferably in New York; experienced in industrial building design. PW-814, Eng. News-Record.

STRUCTURAL designer, technical and college graduate, 29, single, two years' experience as structural steel detailer and draftsman; five years' experience as designer and checker of designs on varied structural steel and reinforced concrete structures, including two years of responsible design and checking on mill building work. Available on ten days' notice. Wishes position as designer with reputable industrial or railroad firm or building contractor. Location preferably in the vicinity of New York City. PW-838, Eng. News-Record, Philadelphia.

STRUCTURAL engineer, specialist in reinforced concrete and fireproofing, broad experience covering designing, manufacturing, selling and contracting, wishes to make change. East preferred. PW-715, Eng. News-Record, Leader-News Bldg., Cleveland.

STRUCTURAL-MECHANICAL engineer; 13 years' experience in steel, concrete, timber and mechanical and electrical equipment. Design, details and erection of buildings, bridges, cranes, gantries and conveyors PW-693 Eng. News-Record, Philadelphia.

STRUCTURAL steel and reinforced concrete designer, checker and detailer; technical graduate; ten years' experience on all classes of work; have specialized on power houses and mill buildings; desire position as squad leader or checker. PW-775, Eng. News-Record, Philadelphia.

STRUCTURAL and mechanical engineer, graduate, ten years' experience buildings, bridges, cranes, derricks, conveyors, etc.; executive; references. PW-844, Eng. News-Record.

STRUCTURAL engineer of extended experience in all classes of steel structures, detailing, designing and estimating, wishes permanent executive position with live concern. Expert in economical and efficient design. PW-799, Eng. News-Record, Leader-News Bldg., Cleveland.

YOUNG man, married, technical graduate, thorough knowledge reinforced concrete and structural steel; experience railway bridge work, wants position anywhere. B. S., 3730 Page Blvd., St. Louis, Mo.

Draftsmen

DESIGNER, eight years' design, detail and erection, steel and concrete structures, conveyors, industrial work, etc., wants position in New York City. PW-777, Eng. News-Record.

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DESIGNING engineer with wide experience in electric machinery, switchgear, station layouts, steel, brick and concrete structures and general mechanical apparatus, at present with large chemical company, desires change; responsible position with established concern only. PW-759, Eng. News-Record.

DRAFTSMAN, surveyor, technical graduate, five years varied civil and mechanical engineering, office management, desires connection; New York or vicinity. PW-832, Eng. News-Record.

DRAFTSMAN, general building construction, can estimate, superintend job, 7½ years' experience. PW-728, Eng. News-Record.

ENGINEERING draftsman, graduate C. E., 27; five years design of construction, inspection and surveys. PW-696, Eng. News-Record.

ENGINEER, 31, 12 years' varied experience, largely in design of concrete and steel industrial buildings; capable designer, estimator and draftsman; with large contracting-engineering firm for five years as chief draftsman and assistant engineer; $225; available about July 1. PW-800, Eng. News-Record, Philadelphia.

ENGINEERING draftsman; 13 years' experience, steel and concrete design; can prepare complete working drawings for all types of structures; accurate; good letterer; also experience architectural drafting, details. PW-801, Eng. News-Record, Philadelphia.

ESTIMATOR and draftsman, 33, married, 12 years' experience ornamental iron, miscellaneous structural and plate work; thoroughly familiar with shop practice and costs; now employed; any location. Address PW-853, Eng. News-Record.

EXPERIENCED designer and draftsman desires responsible position in Greater New York. Industrial plant engineering a specialty; steel and concrete structures, general plant layout, conveying equipment, etc. Address Engineer, 404 East 125th St., New York City.

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Owing to the holiday next week, the forms for the Searchlight Section of the

July 3rd Issue

of

ENGINEERING NEWS-RECORD

will close for press at 4 P. M Monday, June 30th.

POSITIONS WANTED.

DESIGNER and draftsman; 10 years' experience; steel, concrete, buildings, ships; New York position preferred. PW-849, Eng. News-Record.

RAILROAD and map engineer-draftsman desires responsible position with first-class company; on or in charge of map work, railroad or otherwise, or on special assignments for chief, right of way or valuation engineer. Could assume direction of right of way re-mapping, also of surveys and investigations for same. PW-819, Eng. News-Record, Chicago.

TECHNICAL graduate, six years' experience as draftsman, designer, cost estimator in steel plate shop, desires permanent connection in same line or other structural or mechanical lines where opportunity for sales work will be given after ability has been demonstrated. Address PW- 861, Eng. News-Record, Leader-News Bldg., Cleveland.

Surveyors

INSTRUMENTMAN, 23, has four years' experience on construction and railroad work, wishes position outside or in drafting room; in or within commuting distance of New York City preferred. PW-818, Eng. News-Record.

INSTRUMENTMAN desires to specialize in highway work; three years' experience in engineering, various lines; further details on request. PW-865, Eng. News-Record, Philadelphia, Pa.

SURVEYOR of mines, both underground and surface workings, including all branches of tram roads, and standard gauge; four years' laboratory work; drafting with mechanical mine and map making; at present employed as construction engineer in charge of mine and mill; have set of field and drafting instruments; available immediately. P. O. Box 195, Stuart's Draft, Va.

SURVEYOR, city, country, soundings and office work, ten years' experience, wishes position. PW-863, Eng. News-Record.

TRANSITMAN and levelman, several years' varied experience, rapid and accurate, of good habits, at present on temporary work, wishes position. PW-754, Eng. News-Record, Philadelphia.

Superintendent

ARE you looking for a high-grade manager, general superintendent, or superintendent with 25 years' practical experience with New York contractors on heavy construction in concrete pavements, other pavements, steam shovel, waterworks, sewers, foundation, railroads, etc., and who began work as a foreman when 17 years old? Born executive, endowed with pep in plenty, and determination to get results; exceptional ability to hold men to highest morale; good education; for interview address "Elmwood," Bethlehem, Pa.

CONTRACTOR'S or engineer's superintendent; paving experience; age 30; civil engineer graduate; can operate asphalt plant. PW-864, Eng. News-Record, Chicago.

CONTRACTORS' superintendent wants position; 20 years' experience in concrete work, pile driving, foundation work, dirt work and general contracting; best of references; go anywhere; will come on make-good plan or no pay; age 36. PW-761, Eng. News-Record, Leader-News Bldg., Cleveland.

ENGINEER, superintendent of construction, 19 years' successful experience railway, subway, sewer and building construction; foundations, heavy and reinforced concrete. College graduate, office and field experience, expert on track work and steam shovel excavation. Last five years contractor's engineer and superintendent. Age 38. Invites correspondence. Address ABC, Lock Box 134, Buffalo, N. Y.

SUPERINTENDENT or general foreman, heavy and reinforced concrete, highway and steam shovel work. PW-703, Eng. News-Record.

POSITIONS WANTED

CONTRACTOR'S engineer, superintendent, executive, estimator, 35, 15 years construction, railroad, concrete, docks, sewers, heavy excavation, municipal work, etc.; willing to work in France; available immediately. PW-851, Eng. News-Record.

CONTRACTOR'S engineer, superintendent, executive, estimator, 35, Assoc. Mem Am. Soc. C. E.; 15 years construction railroads, concrete arches, bridges, docks, wharves, pile driving, heavy excavations, municipal work, etc., available immediately. PW-831, Eng. News-Record, Philadelphia.

CONTRACTOR'S superintendent; thorough experience on concrete, brick and frame buildings, with reputation for speed and producing results; some experience as civil engineer, can run own instruments; full details and reference by letter. American, age 33. M. S., 716 Venango Street, Philadelphia.

FOREMAN desires position on concrete road work; age 33; 12 years' experience on construction work; best references. Salary $50 per week. PW-752, Eng. News-Record.

I AM looking for an opening as general superintendent or supervising engineer with a construction organization; nine years' experience on engineering construction, starting as foreman. J. D. Tuller, 29 Lewis St., Auburn, N. Y.

SHOP foreman; several years' experience at bridge and structural work; best of references from former employers. PW-850, Eng. News-Record.

STRUCTURAL designer and draftsman, technical graduate, ten years' experience, industrial buildings, smelters, conveyors, etc., seeks position in New York or vicinity. PW-794, Eng. News-Record.

SUPERINTENDENT of construction, 16 years' experience. Industrial plant construction, reinforced-concrete construction, and all classes of deep foundation work. First-class executive. PW-1001, Eng. News-Record.

SUPERINTENDENT desires position in charge of sewer, water mains, or road construction; three years with N. Y. state highway department in charge of road construction. Age 33. Salary $250 per month. PW-751, Eng. News-Record.

EFFICIENT INVESTMENT OF Your Building Fund is offered by an Executive Engineer of twenty-five years' experience designing and constructing bridges, buildings and docks of timber steel and reinforced concrete—recently returned from civilian war service.

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ENGINEER, MANAGER, SUPERINTENDENT Position, with opportunity for advancement, to take partial or complete charge—estimates, organization, construction, modern business practice and can handle men and materials efficiently Six years' experience general heavy contracting, including bridges, highways, concrete construction and rock excavation; 2 years engineer officer, Combat Regt. A. E. F. Age 27. Salary $200 Employed as superintendent.

PW787—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill.

MECHANICAL ENGINEER—37, married, 12 yrs. general engineering experience since graduation along mech., civil, and electrical lines, now employed, desires position as chief or assistant engineer. Experience includes estimating, machine design, buildings, water and steam piping, sewers, structural steel, reinforced concrete, plant layout, paving, wharves, piers, electrical power distribution, etc. 2 yrs. chief draftsman. Minimum salary considered, $300 per month, with chance for advancement.
PW825—Engineering News-Record, Philadelphia

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POSITIONS WANTED

SUPERINTENDENT highway construction, 11 years' experience, age 32, recently discharged from army; absolutely competent and capable; what have you to offer? P. A. R., Box O, Nanticoke, N. Y.

SUPERINTENDENT, steam shovel work, quarry and crushing plants, road building, either concrete, macadam, chert or sand clay, concrete, reinforced or plain, reservoir and cyclopean masonry. Can you use a live wire on above lines? Can assemble a thorough organization immediately; 20 years' experience; open for immediate engagement. PW-638, Eng. News-Record, Philadelphia.

SUPERINTENDENT and general foreman on mill construction, school or bank and office buildings, 17 years' experience; absolutely trustworthy and reliable. PW-645, Eng. News-Record.

SUPERINTENDENT of construction; American; 43; A-1 organizer; practical, trustworthy, energetic; broad experience all kinds of building construction; best references; available; salary, $75 per week. PW-848, Eng. News-Record.

SUPERINTENDENT of construction with 15 years' experience on heavy steam shovel work and general construction; have only been with two concerns; hustler and know how to organize and handle men. PW-773, Eng. News-Record, Leader-News Bldg., Cleveland.

SUPERINTENDENT or general foreman, 12 years' experience, highway, sewer and water construction. Salary $60 per week. At present employed. Available immediately. PW-755, Eng. News-Record, Leader-News Bldg., Cleveland.

SUPERINTENDENT or general foreman, age 35, good organizer, can handle large forces; steam shovels, concreting, grading, sewers; 16 years' experience; go anywhere. PW-858, Eng. News-Record.

SUPERINTENDENT, 42, over 20 years' practical experience on heavy construction; tunnels, sewers, deep foundation, river and heavy timber work underground. Difficult excavation; reinforced concrete a specialty; best of references. PW-842, Eng. News-Record.

SUPERINTENDENT or general foreman, practical engineer; special course Columbia University; recently returned American Expeditionary Force. PW-763, Eng. News-Record.

POSITIONS WANTED

SUPERINTENDENT of construction, 15 years' experience on heavy steam shovel work; have had charge of some of the largest excavation jobs in U. S. and all made money; seven years with last concern; hustler; good organizer; best references. PW-852, Eng. News-Record, Leader-News Bldg., Cleveland.

TECHNICAL and practical man, 10 years building superintendent, desires a change with a chance to become associated with firm; salary $400. PW-833, Eng. News-Record, Leader-News Bldg., Cleveland.

YOUNG civil engineer, two years' surveying experience; at present employed with building construction company, desires a position as assistant superintendent. Anywhere in United States. PW-698, Eng. News-Record.

Miscellaneous

ARCHITECT and engineer wants position in charge of drafting room or construction department; thorough technical training; ten years' experience; age 36; married; salary $4000. PW-813, Eng. News-Record, Chicago.

A BUILDER of large experience wants to connect with a contracting company that wants business in Southern territory. PW-862, Eng. News-Record.

DO YOU need a $5000 executive? One with broad business and engineering education and training? Alert, on-the-minute, gentleman; New York City preferred. PW-585, Eng. News-Record.

ENGINEER, general construction and underpinning, railroad construction; just returned from American Expeditionary Force. PW-762, Eng. News-Record.

EXECUTIVE engineer, 30, technical graduate, experienced in engineering, production, costs, valuation and management; now employed, general manager, salary $6000, in complete charge sales, production, etc., 250 employees; references furnished. PW-815, Eng. News-Record, Philadelphia.

YOUNG man, 17 years old, will base four years' college course on specialized training in any line of engineering if some well-known corporation or individual can guarantee position with good chance for advancement at end of college course. At present has good speaking knowledge of Spanish and slight knowledge of French. For particulars address A. W. K. Billings, Jr., 10 Bancroft Hall, Andover, Mass.

POSITIONS WANTED.

EXECUTIVE manager desires entrance into large industrial concern or large construction company, to secure lead to responsible executive position. Exceptionally versatile, can tackle anything. Business training. Born analyst. Great organizer. Abundance initiative, resourcefulness, and endowed by nature to lead and hold men to highest pitch of esprit de corps. Exceptionally thorough on detail. Good address, right business bearing to command. Naturally aggressive, forceful, full of pep, but well tempered by 22 years' practical training as contractor, manager, chief engineer, superintendent, assistant superintendent, starting work at 18 as foreman. Handled all kinds machinery. Expert steam and gas engines. Experienced in every and all kinds of heavy construction work. Two years resident engineer, instrumentman and inspector. Mechanical and civil engineer. Look me over. Q. E. D., 332 Dellwood St., Bethlehem, Penn.

FOUR years night technical school; five years' experience on detail and design of steel and reinforced concrete of mill and industrial buildings, field and office on street layout, etc.; commercial education; want to locate in New York City; salary $175. PW-854, Eng. News-Record.

LIVE, tough job of cost analysis, estimating, valuation or statistical work, by high-grade cost engineer, capable of co-ordinating information furnished by the accounting and engineering departments, thereby determining unit costs of present work and probable cost of future work. Must be in Philadelphia. PW-871, Eng News-Record, Philadelphia.

SANITARIAN and welfare man, Belgian by birth, naturalized American, at present employed as project sanitarian at a shipping board housing project of 1700 homes, seeks connection with concern interested in large construction projects, or European reconstruction work. PW-637, Eng. News-Record.

SPANISH-SPEAKING master mechanic and licensed chief engineer, desires to connect with corporation operating in Latin America. PW-866, Eng. News-Record.

YOUNG man, 30, technical training, 10 years' experience designing machinery and tools; familiar with shop and foundry practice; inventive mind and integrity of character, selling ability, desires position. PW-846, Eng. News-Record

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Company controlling nationally known specialty for concrete buildings will consider purchase, manufacture or sales control of similar articles, or will handle sales in Philadelphia territory of any building material or specialty on commission basis. AS-843, Eng. News-Record, Philadelphia.

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Wants to represent American house in that country; engineer and contractor with 30 years' experience before the war, 2 years as Major and Lieut-Col. with A. E. F.; perfect facility in French language. References and other information can be obtained by return mail from Searchlight Gilbert, Engineering News-Record.

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Brandis Transit For Sale
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SALE OF NEW STEEL PLATES AND CHANNELS at Norfolk.—There will be sold 343,000 pounds of medium steel channels, 40 to 45 feet ni length, 9" x 3.8" x 28.6 pounds per foot; also 15,000 pounds medium steel plates, 5' 5" x 26" x ⅜" new steel, unused, in good condition, stored at the Navy Yard, Norfolk. Bids invited for all or a portion. Sealed bids will be received by the Disbursing Officer, Navy Yard, Norfolk, up to 1:30 **P.M., July 15, 1919**. Inspection is invited. Schedules of sale and further information may be obtained from Lieutenant Commander F. R. Holt, Senior Member, Board of Survey, Appraisal and Sale, Navy Yard, Norfolk, Va. Josephus Daniels, Secretary of the Navy.

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Double blankets for hard wear. Oxford grey color. Size 48/70. Weight 4 lb. Price $2.25.

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10 A. M., JULY 17, 1919

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10 A. M., July 7, 1919

at Zone Supply Office, 461 8th Ave., New York. Particulars, special bid forms can be obtained at above Office, Zone Supply Office, Philadelphia, or Surplus Property Div., Munitions Bldg., Washington, D. C. Refer to S.P.D., No. 1090 RM.

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NOTICE IS HEREBY GIVEN that the undersigned, Francis P. Garvin, Alien Property Custodian, will offer for sale, at public sale, to the highest bidder, at the office of H. R. Heinicke, Inc., 147 Fourth Ave., New York, at 3 o'clock, P. M., on the 1st day of July, 500 Shares of the capital stock, par value $100 each, being the entire issued capitalization of H. R. Heinicke, Inc., a corporation created and existing under and by virtue of the laws of the State of New York; and 39 Shares of the capital stock, par value $100 each, out of an issue of 139 Shares of Globe Clay Company, Inc., a corporation created and existing under and by virtue of the laws of the State of Ohio.

Full description of and information concerning the property to be sold, the terms and conditions of inspection and sale, and the order thereof, may be obtained by application to JOSEPH F. GUFFEY, Director, Bureau of Sales, 110 W. 42d St., New York City.

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132-ft. x 100-ft.—24-ft. to eaves. Roof consists of two trusses—50-ft. span each. Used as power house and machine shop during construction of East River Tunnel.

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for handling sand; capacity 60 tons per hour; new or second-hand. State full particulars.

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One each, second-hand three fourths and one yard wet mix

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with steam engine, without boiler. Must be in first-class working condition.
Also, one 50 hp. vertical

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State Lowest Price and Condition

W822-Engineering News-Record
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Used Pumping Engine

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W-718—Engineering News-Record
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STEEL SHEET PILING

125 tons or part thereof, 35 ft. long and 235 tons 14 to 16 ft. long. Lackawanna piling preferred.

W872—Engineering News-Record
10th Ave. at 36th St., New York City

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STEEL SHEET PILING

State number pieces, exact length, make, weight per foot, condition, location, price f.o.b. cars loading point.

W808 Engineering News-Record,
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1—½-yd. full circle **traction steam shovel, or Keystone machine.**
1—**Clam shell outfit,** preferred on traction wheels, for unloading sand and gravel from cars.

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TWO REVOLVING CRANES

full circle swing; 10-ton capacity; 40 to 50 ft. boom; movable on track; steam or electric power, fully equipped.

First-class condition; immediate delivery.

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A Tandem Compound or Cross Corliss Compound

Steam Engine

between 300 and 500 H.P. to carry 150 lbs. steam pressure, and would prefer one connected to an A.C. Generator, 60 cycle, 3 phase, 440 volts.

Must be in good condition. State where these outfits can be seen and price.

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5-TON JINNIWINK
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3—2½-yd, 2-Line

Clam-Shell Buckets

Advise name of manufacturer, type.

Three Hoisting Engines

3 Drums, 10 x 12, standard make, link motion, Drums 54 in. in diameter.

Vertical Boilers

3—60-hp., 100 lb. steam pressure.

State location for inspection, also condition.

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IN FIRST-CLASS ORDER

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Five coal hoists 10 x 12 Meade-Morrison Tandem drums, with a boiler 54 in. x 10 ft. or 60 in. x 60 in. vertical Mass. Standard. Also one 36 in. x 7 ft. Mass. Standard boiler.

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Six 2 and 3 drums 10 x 12 standard make of hoisting engines with Mass. standard boilers, 10 h.p. to 20 h.p. 220 volts direct connected. One and two drum electric hoists. 75 and 100 h.p. electric hoists. 500 volts A.C. 3 phase 60 cycle.

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One 40 ton 3 motor crane, 220 volts, A.C. one 20 tons 3 motor crane, 220 volts, A.C. 40 ft. span between centres.
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5-5 ton gantry cranes

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All Boilers complete with all fittings.

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1—1¼-cu.yd. Hayward, Class "E" Clamshell.
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2—1¼-cu.yd. ex. heavy Hayward Orange Peels.
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30—4-cu.yd., 36-in. gáge Western Wheeled Scraper Dumps.
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25—12-cu.yd. standard gage Western Wheeled Scraper, air dumps.

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1— 950-cu.ft. Ingersoll-Sargeant, steamdri ven.
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3—2400-cu.ft. Ingersoll-Rand, steam driven.
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1—60 x 84 Power & Mining "Superior" Jaw, rope drive, with 300-hp., A.C. motor.

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5—15-ton "American" Guy Derricks, 115-ft. masts, 100-ft. booms, 16-ft. dia. Steel Bull Wheels. Arranged for standard block and fall work.
1—15-ton, same as above except for bucket operation.
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All above Derricks with or without guy and running ropes.

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1—10-15-ton Standard Steel Stiff Leg Derrick, mast 40 ft., boom 70 ft., steel bull wheel 12 ft. dia.

HOISTS (Electric)

3—60-hp. Lambert, double drum and swingers.
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1—12 x 12, D.C., Lidgerwood Cableway.
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10— 9 x 10, D.C., D.D., Lidgerwood, with swingers.
1—9¼ x 12, D.C., D.D. Lambert, with swinger.
1—10¼ x 12, D.C., D. D. Lambert, with swinger.
2—8¼ x 10, D.C., D.D. Lidgerwoods, with boilers.
1—8¼ x 10, D.C., D.D. American, with swinger and boilers.

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1—18-ton, 10 x 14 Davenpor Saddle Tank.
3—25-ton, 12 x 18 American Saddle Tanks.
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2—20-ton, 8-wheel, standard gage Industrials, 40-ft. booms, steam brakes, air line, outriggers, bucket drums, counterweight.

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Also Air Receivers, Drills, Drill Sharpeners, Mixers, Pumps, Steam Hammers, Wire Rope, and other contractors' equipment.

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1— 599 cu.ft. X-2 & X-3 Ingersoll, steam, two stage.
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1— 200 cu.ft. BSFF Bury, simple steam, single air, 50 lb.
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1—3300 cu.ft. PRE Ingersoll, two stage, Electric Driven.
1—1190 cu.ft. XB-2 Ingersoll, two stage belt.
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1—741 cu.ft. O-CB Chicago, two stage belt with motor.
1— 680 cu.ft. WJ Sullivan two stage belt.
1— 599 cu.ft. XB-2 Ingersoll, two stage belt.
1—464 cu.ft. ER-1 Ingersoll, single stage belt.
1— 145 cu.ft. ER-1 Ingersoll, single stage belt.
1— 98 cu.ft. BBFF Bury, single stage belt.

2—300 hp. Edgemoor, 200 lb. Mass.
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Boilers—H.R.T. & Water Tube.

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500—220/440 A.C., 3/25 Cycle (all sizes).
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Engine & Turbo Generator Sets—A.C. & D.C. (all sizes).
Boilers—H.R.T. & **Water Tube—all** sizes.

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Hoisters, Air Compressors, Concrete Mixers, Centrifugal Pumps, Diving Outfits, Rock Drills, Derricks, Pile Drivers and General Contractor's Equipment, both Steam and Electrically Driven.

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1—American, 35-ton, 14 x 24-in., Saddle Tank Locomotive, std. gage
1—Porter, 28-ton, 12 x 18-in. Saddle Tank Locomotive, std. gage.
1—Vulcan, 25-ton, 12 x 16-in. Saddle Tank Locomotive, std. gage.
2—American, 25-ton, 12 x 16-in. Saddle Tank Locomotive, std. gage
6—Porter, 12-ton, 9 x 14-in. Saddle Tank Locomotive, 36-in. gage.
2—Vulcan, 12-ton, 9 x 14-in. Saddle Tank Locomotive, 36-in. gage.
1—American, 25-ton, 10 x 16-in. Forney Type Locomotive, 36-in. gage.
4—American, 30-ton, 13 x 18-in. American Type Locomotive, 36-in. gage.
2—Baldwin, 32-ton, 14 x 20-in. Mogul Type Locomotive, 36-in. gage.
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6—Standard gage Passenger Coaches.
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2000 ft. Rand duplex 20 x 20 x 30
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886 ft. Sullivan 18 x 11 x 14
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All voltages and sizes 1 to 200 H.P.

1000 Other Machinery Bargains

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FOR SALE
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COMPRESSOR

Class A-2, piston displacement 1554 cu.ft. per min. Machine knocked down and will sell rather than store at any reasonable offer.

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LARGE RIVETED PIPE

We have 1500 ft. 16 in. Riveted Steel Pipe with riveted flanges on ends, lengths running from 30 to 40 ft., plate approximately ¼ in. thick. Pipe is in excellent condition. Has been used for temporary gas mains. Excellent pipe for dredging or pumping lines.

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60-M capacity Flat Car, 40-ft. long, M.C.B. Hoisting Engine, 7 x 10, D.C., 2-D Lidgerwood, 25-hp. boiler, Dake swinger, 30-ft. A-frame derrick.

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- 1—Marion 75, 4-yd. dipper, shop number 2191.
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- 2—Model 18 Osgood Shovels, ¾-yd. dippers, shop numbers 375 and 521.
- 1—Type "B" Erie Shovels, ¾-yd. dippers, shop number 256.

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- 2—Standard gage, 50-ton Switchers.
- 10—18-ton, 10 x 16-in. Dinkeys, 36-in. gage.
- 4—12-ton, 9 x 14-in. Dinkeys, 36-in.gage.
- 1—10-ton, 7x 12-in. Dinkeys, 36-in. gage.

CARS

- 50—Western 12-yd., air dump, standard gage.
- 25—Oliver and K. & J. Wood Beam Cars.
- 1—Western, narrow gage, hand operated Spreader Car.

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- 1—30-hp. Locomotive Type, on wheels.
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- 2—1-yd. Steubner Controllable.
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- 1—1-yd. Type "E" Blaw.
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- 1—Novo Centrifugal, 4-in. suction, 3½-in. discharge 6-hp. engine.
- 1—FM Centrifugal, 5-in. suction, 5-in. discharge.
- 5—Emerson No. 2.
- 1—Emerson No. 4.

ROAD EQUIPMENT

- 1—Western Road Scraper, 8-ft. blade, adjustable.
- 1—Champion Road Scraper, 8-ft. blade, adjustable.

HAMMERS

- 1—Model 3 Union.
- 1—Model 1 Vulcan, with McDermid base.
- 1—Model 2 Vulcan.
- 1—Model 2 Union.

STEEL PILING

- 322—Pieces 7-in. x 14-ft. Lackawanna Straight Web.
- 24—Corners, 21-ft. long, for 37-lb. Lackawanna Piling.
- 100—Tons, 12¾-in. Straight Web and 14-in. Arch, miscellaneous lengths.

CABLEWAY

- 1—Lidgerwood Cableway, 1164-ft. span, with 9 x 10-in., D.C., Reversible Link Motion Cableway Engine, 3-ton capacity.

Offer Us Your Used Equipment

We are always in the market for heavy construction equipment and buy for cash. We have large repair shops in Pittsburgh, where all equipment is thoroughly repaired before being reshipped. Send for Our Complete List.

H. KLEINHANS CO., Union Arcade, Pittsburgh, Pa.
Eastern Office: 30 Church St., New York

KLEINHANS

FOR SALE

At Camp Colt, Gettysburg, Pa.

2,500,000 ft. First-Class Lumber.
2—50,000 Wooden Water Tanks.
2—12-hp. Gasoline Engines.
2—Worthington Deep Well Pumps.
All Sizes of Pipe, Fittings and Gate Valves from 1-in. to 6-in.
1—Mercury Gauge.

E. W. LEWIS ROOFING CO.
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Steel Sheet
Thousands of Pieces

all makes, weights and lengths.

Quick Shipments. Excellent Condition.

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RAILS, LOCOMOTIVES, CARS
POWER PLANTS, TANKS, etc.

FOR PROMPT SHIPMENT

Buckeye Steam **Trenching Machine.**
No. 11 Koehring **Steam Paver,** Boom and Bucket.
3—No. 16 Eclipse **Gallon Unloaders.**
1—10-ton Huber **Steam Roller.**
1—10-ton Kelly **Gasoline Roller.**
1—7 x 10 3-Drum **Clyde with attached Swinger.**
5—1-yd. **Maney Scrapers.**
5-ft. x 8-ft. **Pressure Tank.**
30-hp. **Springfield Gas Engine.**

THE T. J. LANE EQUIPMENT CO.
1026 West Main Street, Springfield, Ohio

FOR SALE

1—Abenaque-Sullivan **compressor,** 90 cu. ft. per minute; mounted with four Sullivan jack hammers, hose steel, etc., complete.
2—3½-ton Sterling motor **dump trucks.**
1—5-ton Sterling motor **dump truck.**
A quantity of 1¼-in. and 1½-in. **pipe.**
1000 lin. ft. 16 lb. 24-in. gauge **track.**
4—1½ cu. yd. **Koppel cars.**
1—1½-h.p. Bulldog Fairbanks **motor** and **pump.**
1—2½ Climax **crusher,** not mounted.

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523 Main Street, Utica, N. Y.

25,000 ft. 4-in. Reading Genuine

WROUGHT IRON PIPE

with American threads and couplings.

This material is new and in first-class condition. Immediate shipment from our warehouse in Brooklyn.

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New and second-hand. With new threads and couplings. All sizes from ½ to 12 in Also cut to sketch.

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ALBERT & DAVIDSON, Inc.

FOR SALE
All Sizes
Any Quantity
Rethreaded and Coupled
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PIPE

Second Hand and New

WANTED
All Sizes
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PIPE All sizes, bargain prices, second-hand and new

IMMEDIATE DELIVERIES:

8,000 ft. of 12 -in. pipe
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10,000 ft. of 6 -in. pipe
10,000 ft. of 4 -in. pipe
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50,000 ft. of 2 -in. pipe
50,000 ft. of 1½-in. pipe
100,000 ft. of 1¼-in. pipe
100,000 ft. of 1 -in. pipe

Also a large stock of 16, 18 and 20-in. pipe.

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THE MARINES

"First to Fight"
—the high cost of pipe, valves and fittings

The good work of the "Marines" is talked about because we were fortunate in purchasing a large quantity of slightly used and second-hand pipe, valves and fittings. Prospective buyers should familiarize themselves with our attractive prices for the large stock on hand of used wrought and steel pipe, gate, globe and angle valves; cast iron and malleable, screw and flanged fittings. All sizes from 1 in. to 24 in., inclusive. Also spiral and straight riveted, black and galvanized; sizes 4 in. to 24 in.

MARINE METAL & SUPPLY CO.
167 South St., New York City

PIPE SECOND HAND

With new threads and couplings; also cut to sketch.

PFAFF & KENDALL
Ferry & Foundry Sts., Newark, N. J.

PIPE

Second Hand and New

Large stock, all sizes.

Immediate Delivery.

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Fine Condition *Prompt Delivery*

40—12-in. **Beams,** 10 to 11 ft., 9 in. long.
350—15-in. Beams, 17 to 19 ft., 8 in. long.
150—20-in. Beams, 15 to 18 ft. long.
Variety of other beams on hand. Send us your specifications.

TANKS

5—Conical Tanks, overall length 16 ft. 2 in., largest diameter 9 ft. 5 in., length of tank 14 ft. 2 in., made of 5/16-in. plate.
10—6 ft. diameter x 17 ft. to 19 ft. 6 in. long.
Many others—open and closed.
1—400,000 gallon.

PIPE

Large stock, all sizes of second-hand pipe, rethreaded and coupled, for immediate delivery.

TUBES

Seamless (New)

-tons, 2½-in. x 7-ft. 1-in.

Lap Welded (Second Hand)

150-ton, 2½, 3, 3¼, 3½ and 4-in., 15 to 20 ft. long.

BOILERS

6—Manning Vertical Boilers, 185-hp., 120 lb. pressure.
2—Erie City Watertube, 400-hp. each.
1—Stirling, 250-hp.
1—Mass. Standard, 72 in. x 17 ft. 6 in. H.R.T.
1—Mass. Standard, 66 in. x 20 ft. 6 in. H.R.T.
Many other boilers.

Lot of 100 tons of 1-1/16 in. Round Steel Bars, 18 ft. long.
1—200 hp. American Feed Water Heater.
1—1300 hp. Berryman Feed Water Heater.
1—1300 hp. Geo. F. Blake Heater.
1—1000 hp. Wheeler Condenser.

Prompt Delivery
Send us a list of your requirements

THE PERRY, BUXTON, DOANE CO.
214 W. 1st St., So. Boston, Mass.

PIPE

NEW — USED

FOR EVERY PRACTICAL PURPOSE

We carry available for prompt shipment large stock of all sizes in random lengths.

Can offer used pipe threaded or cut to specification as per your requirements. Will guarantee satisfaction and quality equal to new material.

Inquiries Solicited

Peerless Iron Pipe Exchange.
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We Buy for Cash

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Buys—Sells—Rents

INDUSTRIAL EQUIPMENT EXCHANGE

75 Westminster St., Providence, R. I.

The following is only **a** partial list of the equipment **we have** for sale. If what you want **is** not listed here send for our complete list. All equipment offered has been inspected by us and is in first-class working condition.

BOILERS

1—250 H.P. Dillon Return Tubular, 140 lb. pres.
2—250 H.P. Heine 100 lb. pressure.
1—75 H.P. Whittier R.T.B., 8—32 in. tubes, 12 ft. long, 7 extra grate bars.
1—60 H.P. Mass. Standard Vertical.
1—100 H.P. Loco. Type, Mass. standard.
1—60 H.P. Loco type, Mass. standard.
1—75 H.P. Vertical type, Mass. standard.
1—50 H.P. Loco. type, Mass. standard.
1—42 in. x 90 in. Mass. standard, complete.
1—12 in. x 84 in. Mass. standard, complete.
1—36 in. x 75 in. Mass. standard.
1—34 in. x 75 in. Mass. standard.
124 in. x 5 ft. Mass. standard, complete with all fittings.
1—24 in. x 6 ft. 6 in. Mass. standard, complete with all fittings.
Horizontal Upright and Return Tubular up to 1100 H.P.

ENGINES

1—100 H.P. Atlas 14 in. dia. 20 in. stroke, 125 to 150 r.p.m. flywheel, 108 to 16½ horse-power based on 85 lb. of steam.
1—75 H.P. Armington & Sims, 13¼ in. dia., 12 in. stroke, 125 r.p.m.
Can make delivery on many types of Corliss Engines.

STEAM SHOVELS

6—Thew, O tractor type, ⅝-yd. bucket, extra good.
2—Vulcans revolving, ¾-yd., good condition.
1—Vulcan, not revolving, 1-yd. good condition. Two buckets.
1—Thew O Tractor type, ⅝-yd., good condition.
1—Osgood Revolving, ⅝-yd. good condition.
6—Thew O Tractor type, ⅝-yd. extra good.
Some large shovels.

HOISTING ENGINES

4—Lidgerwood 8 x 6, D.C., D.D.
1—Lidgerwood 18 H.P. skeleton hoist.
1—Lidgerwood 30 H.P. D.C., D.D.
1—Lidgerwood, single drum, 20 H.P.
1—American 18 H.P. skeleton hoist.

HOISTS

Double drum, double cylinder with boilers
1—Byers D.D., D.C., 5 x 10, condition good.
1—Kendall & Sons, D.D., D.C., 5½ x 10, extra.
1—Mundy D.D., D.C., 5 x 8,-90 lb. Mass., extra.
3—Lidgerwood, D.D., D.C., 6¼ x 8, Mass., extra.
2—Lidgerwood, D.D., D.C., 7 x 10, Mass. S. extra.
3—Lamberts, D.D., D.C., 7½ x 10, Mass., S. extra.
4—Lamberts, D.D., D.C., 8½ x 10, Mass., S. extra good condition.

HOISTS

Single drum, single cylinder with boilers
2—S.D., S.C., 6 x 12. Good condition, complete. Over 75 Hoists in stock.
All Hoists in fine condition.

AIR COMPRESSORS

All makes and sizes. Gasoline, steam and electric driven.

LOCOMOTIVES

2—Porters, 9 x 14—36 in. gauge.
2—Vulcans, 9 x 14—36 in. gauge.
2—Vulcans, 9 x 16—36 in. gauge.

BUCKETS (Clamshell)

1—Hayward, 5-yd., like new.
1—Mead-Morrison, ¾-yd.
1—Mead-Morrison, 1-yd., good condition.
1—Mead-Morrison, 2-yd., new shape.
1—Brown Hoist, 2½-yd., good condition.
1—Ollie Johnson, 4-ton, new.
1—Williams, 1½-yd., condition new.

BUCKETS (Orange Peel)

¼-yd. to 3-yd.—all makes.

DERRICKS

1—75 ft. mast, 60 ft. boom.
3—60 ft. mast, 45 ft. boom, hand.
3—Large Guy Derricks.
Also Derricks of other sizes.

TRENCH EXCAVATOR

1—Austin Excavator or Trench Machine.

WIRE ROPE (All sizes)

ROAD ROLLERS

0—10 and 12-ton Buffalo, Pitts and Monarch.

TANKS

All sizes, pressure and storage.

STACKS

Practically all sizes.

PIPE (All sizes)

LOCOMOTIVE CRANES

1—10-ton, 4-wheel, Williams, NEW.
1—Tandem Crane.
1—15-ton Crane.

SPECIAL

CONCRETE LIGHTERS

New concrete Lighters, 500 tons capacity.

TUG BOATS

5—67 ft. to 110 ft.

CRUSHER PLANTS

STEAM VESSELS

SAILING VESSELS

(Complete)

STEEL COAL TOWER

Capacity 6 buckets per minute. New condition.

PUMPS

All makes and sizes.

CENTRIFUGAL PUMPS

Any make or size.

DUMP CARS (Standard Gauge)

DUMP CARS (36-in. Gauge)

15—4-yd. 2-way, Western.

LUMBER

We are prepared to supply at short notice large shipments of native lumber—either carload or cargo lots.

PILING

Oak, Chestnut or Yellow Pine

WE BUY—SELL—RENT

NOW READY FOR IMMEDIATE SHIPMENT

LOCOMOTIVE CRANES

1—Brownhoist, 15-20-ton, 8-wheel, 40-ft. boom, 54-in. dia. A.S.M.E. boiler, with or without 2-yd. Brownhoist coal clamshell bucket.
1—Browning, Type No. 1, 15-ton, 4-wheel crane 45-ft. boom, bucket drums equipped, 1-yd. clamshell.
1—"American" Railroad Ditcher. "Twenty Machines in One" Locomotive Crane Work, Clamshell and Orange Peel Bucket Work, shipbuilding, log loading, steam shovel work, etc.
1—Byers Auto Crane, equipped with 30-ft. boom

LOCOMOTIVES

1—60-ton American 6-wheel switcher, driving wheels, 44-in. diameter, carries 150-lb. steam, no truck weight, all on drivers. Excellent condition, just out of shop.
1—Baldwin, 30-ton standard gage, type 0-4-0, saddle tank.

ROAD ROLLERS

1—10-ton Tandem Pioneer.
1—2½-ton Iroquois.
1—10-ton Kelly-Springfield, 3-wheeler.
1—15-ton Kelly-Springfield, 3-wheeler.
1—10-ton J. I. Case, 3-wheeler.

AIR COMPRESSORS

1—Norwalk straight line, 2-stage, 10-in. intake air cylinder, 6½-in. compressing cylinder, 10-in. steam cylinder (all cylinders of 12-in. stroke), capacity 195 cu.ft. at 180-r.p.m., 100-lb. pressure.
1—Blake-Knowles, 10 x 10, belt driven.
1—Ingersoll-Rand Imperial Type 10, belt drive Compressor, capacity 1190 cu.ft. of free air per minute, good for 110 lb. pressure. Compressor now driven by G. E., 200-hp. motor, D.C., 220-volt, 450-r.p.m. Will sell compressor or motor separately.

BUCKETS

1—1½-yd. Clamshell Bucket.
1—Hayward, class E, 1½-yd. capacity clam shell bucket
1—Page 1 yd. capacity dragline bucket.
1—1-yd. Clamshell, type V, Orton & Steinbrenner.
3—1½-yd. Clamshell, type V, Orton & Steinbrenner.
1—1½-yd. Clamshell, type C, Hayward.

GENERATOR

1—100-kw. Western Elec., 125-volt, D.C., belted to Ball Engine.

BOILERS

1—Marine type, 150-hp. (portable).
1—Marine type, 100-hp. Freeman internal fired portable boiler, diameter 84 in., length overall 18 ft. 125-lb. pressure.
1—30-hp. locomotive type, portable Boiler and engine, mounted on iron wheels with engine mounted on top of boiler.
2—18-hp. Vertical.
1—30 hp. Vertical.
1—10-hp. Vertical.
1—8-hp. Vertical.

HOISTING ENGINES

Derrick Hoist

1—60-hp. Puget Sound, heavy duty, double cylinder, double drum Hoist, with 60-in. diam. butt strapped boilers. Good log loader or heavy derrick engine.
2—Byers 16-hp. double cylinders, double drum, equipped with boilers and swinging gears.
1—9 x 10 Lidgerwood, double cylinder, double drum, with special boiler, all steel gears, engine built for heavy duty.

MINE AND CABLEWAY HOISTS

1—Flory 10 x 12 D.C. double tandem drum engine. Drums 40 in. diam. x 40 in. face. Levers banked in quadrant.
Lambert 10½ x 12 double cylinder, single drum, 38-in. diam., 24-in. face. Drum grooved, will take up ¾-in. cable. Drum flanges 8 in. deep. Link motion.
1—Flory, 8½ x 10, D.C., D.D., skeleton, link motion, has quadrant.
1—Lidgerwood tandem, drum 8½ x 10, D.C. drums 36-in. dia., 24-in. face, link motion

CABLE

1840 ft. one piece 2" dia. locked wire rope for tramway or cableway use.

STANDARD SHOVEL

1—Marion Model 50, railroad trucks, 2 yd. dipper

REVOLVING SHOVELS

1—Marion Model 28, on traction wheels, ¾-yd dipper, Shop No. 3832, new in Spring, 1917. Like new in condition.
1—Marion Model 31, on traction wheels, 1½-yd dipper, special 23-ft. boom, 17-ft. dipper handle.

CONCRETE MIXERS

1—Lot concrete spouting, size 14½-in. wide, 9½-in. deep: hopper connection.
3—Complete standard gage Concrete Mixer Railroad Car Outfits, one car equipped with No. 12 Smith Gasoline driven, one car with No. 12 Smith steam driven, the other car equipped with Smith-Chicago steam driven.
2—Smith No. 1 gasoline driven, on trucks.
2—Smith No. 11 steam driven, on trucks, with side loaders.
1—Cube No. 11, steam driven, on trucks, with side loader.
6—Cube No. 17 steam driven, on trucks, with side loaders.

CARS

6—Flat Cars, 50,000 lb. capacity, M.C.B. journals 4 x 7.
4—1-yd. capacity "V" shaped steel two-way dump, 30-in. gage.
25—1-yd. capacity "V" shaped steel, two-way dump, 24-in. gage.

PUMPS

2—Morris 6-in. (sand) centrifugal, direct connected to steam engine.
1—Van Wie 6-in. suction, 5-in. discharge, belt centrifugal Pump.
1—Gould belt driven, 6-inch suction, 5-inch discharge.
1—Swaby, direct connected to steam engine, 6-inch suction, 5-inch discharge.

F. MAYER, 737-738 Monadnock Bldg., Chicago, Ill.

FOR SALE

Immediate Delivery

12-IN. SUCTION DREDGE

5 Years Old

Fully Equipped Electric Light Plant; Pontoons and Pipe; Ready to Work in 2 Days' Notice.

RALPH H. TUTTLE
Eastport, L. I.

FOR SALE

TRENCH DIGGER

No. 3 Municipal Trenching Machine with Manganese buckets, capable of digging 40 cu.yd. per hour. Boom of length to dig 10 ft. deep, 4 ft. wide. Machine in good operating condition. Address inquiries to

FS806—Eng. News-Record
935 Real Estate Trust Bldg., Phila., Pa.

FOR SALE OR RENT

REBUILT DITCHING MACHINES

1—Model E, Parsons, steam driven, cutting 32 in. wide x 15 ft. deep.
1—No. 3, Buckeye, gasoline driven, cutting 15½ in. wide x 6 ft. deep.
1—No. 5, Buckeye, gasoline driven, cutting 24 in. and 26 in. x 5½ ft. deep.
1—Buckeye, gasoline driven, cutting 24 in. and 36 in. x 10 ft. deep, apron traction wheels.

FS 522—Engineering News-Record
10th Ave. at 36th St., New York City

2½-YD. MARION DREDGE

Wooden Hull, 33 ft. x 7 ft. x 89 ft. 45-ft. Boom, complete with all equipment, including 50 Light Generator. Now located in Hudson River.

**American Pipe & Construction Co.,
112 North Broad St., Philadelphia**

FOR SALE

Buckeye Steam-Driven TRENCH DIGGER

No. 9-A, Machine No. 679. Will dig trenches up to ten feet deep and from eighteen to twenty-four inches in width. Purchased new in 1917 and is a very durable machine. Will dig through paving, frozen ground, shale, etc. Apply to Owner, 516 Stambaugh Building, Youngstown, Ohio.

KEYSTONE EXCAVATORS

No. 3, traction, skimmer scoop, ditcher scoop, good condition.

Low Price; Location, Chicago, Ill.

MOORE BROS.
39 So. La Salle St., Chicago, Ill.

12-INCH HYDRAULIC DREDGE

Fully equipped. Electric light plant, Pontoons, Pontoon pipe, shore pipe, rubber sleeves and bands, coal scow with mast and boom. Double drum, hand power with wire blocks and falls. Galley and sleeping quarters for eleven men. All in first-class condition, ready to go into commission.

A. R. Powley Dredging & Construction Co., Inc.
P. O. Box 65, Kingston, N. Y.

FOR SALE OR RENT

No. 6 A. J. Morse & Son

DIVING OUTFIT

MACHINERY RENTAL & SALES CO.
Contractors and Industrial Equipment
2918 Southwest Blvd. Kansas City, Mo.

PUMPS and HAMMER

10-in. Morris Centrifugal. Direct connected.
8-in. Submerged Centrifugal.
No. 3 Vulcan Steam Hammer.

MINNEAPOLIS EQUIPMENT CO.
456 Builders Exchange, Minneapolis, Minn.

E.C.A. REBUILT

EQUIPMENT

For Sale or Rent Immediate Delivery

EQUIPMENT CORPORATION OF AMERICA

CHICAGO, Lumber Exchange Bldg. PITTSBURGH, Empire Bldg. PHILADELPHIA, Land Title Bldg.

LOCOMOTIVE CRANES

1—15-ton O. & S. 4-wheel standard ga. 40-ft. booms, butt strap boilers, bucket operating.
1—No 5 Browning 8-wheel MCB, 50-ft. boom.
2—Late Model Byers Auto.
1—Brand new 30-ton O. & S., 8 wheel, 50-ft. boom.
1—30 ton O. & S. 8-wheel crane bucket operating, 50 ft. boom.

STEAM SHOVELS

2—No. 0 Thews fully revolving with ⅝-yd. dippers.
1—No. 1 Thew 1-yard standard ga.
1—A-1 Thew 1-yd. standard ga.
2—Type B Erie ¾-yd.
1—18 B Bucyrus.
1—No. 3 Thew on standard car wheels equipped 1¼-yd. dipper.
1—Marion Model 60.

LOCOMOTIVES

2—6-ton 24-in. ga. Fate gasoline.
1—6-ton 24-in. ga. Bell, fuel oil.
3—3-ton gasoline 24-in. ga. Plymouths.
2—6-ton 24-in. ga. Plymouths.
1—7-ton 24-in. ga. Davenport.
3—36in. ga. steam locomotives.
1—18 x 24 Baldwin 6-wheel standard ga.
1—32-ton standard ga. Vulcan, new 1917.
2—6 ton 24-in. ga. Koppel steam.
2—8-ton 24-in. ga. Koppel locomotives.

CARS

93—36-in. ga. 4-yd. two-way dump.
33—24-in. ga. 1-yd. V shaped Koppel.
39—24-in. ga. 1½-yd. Koppel.
10—24-in. ga. ¾-yd. Koppel.
6—12-yd. standard ga. Western.
69—1¼-yd. 24-in. ga. V-shaped Koppel.

PAVING MIXERS

1—No. 15 Chain-Belt capacity 15 cu. ft. dry material, equipped with steam engine and boiler, also boom and bucket.
2—No. 11 Koehrings equipped with engine and boiler, also boom and bucket.
1—No. 16 Koehring equipped with steam engine and boiler, also distributing chute.
1—4 sack Austin Cube equipped with steam engine and boiler, also distributing chute.
1—27 E Foote steam engine boiler and distributing chute.
1—12 cubic ft. Chicago, equipped with 10 H.P. Novo gasoline engine and distributing chute.
1—21 cu. ft. Chain-Belt boom and bucket.

ROAD ROLLERS

2—10-ton 3-wheel Kelly-Springfield.
1—10-ton 3-wheel Iroquois.
1—10-ton 3-wheel Buffalo-Pitts.
1— 6-ton Kelly tandem.
1— 8-ton Erie tandem.
1—10-ton 3-wheel Case.
1—10-ton, 3-wheel New York.

PORTABLE TRACK AND RELAYING RAIL

50 tons 20 lb. relayers.
20 tons 30 lb. relayers.
9½ miles 20-lb. 24-in. ga. Portable Koppel track.

EXCAVATORS AND TRENCHING MACHINES

2—Keystone Excavators with skimmers and shovel scoops.
1—Model E Parsons trenching machine.
1—Austin Backfiller.
1—Waterloo Backfiller.
1—Parsons Backfiller.

HOISTS

3—6¼ x 10 Mundy, D.C., D.D. without boilers.
2—7 x 10 Mundy, D.C., D.D. with boilers and swingers.
1—6½ x 12 Mundy, D.C., D.D. with boiler.
1—Mundy Swinging engine.
2—Mundy, D. C., S.D. cableway engines without boilers.
1—8¼ x 10 American, D.C., 3 D. with boiler.
2—8¼ x 10 American, D.D., D.C. with boilers.
1—7 x 10 American, D.C., D.D. with boiler.
120-Hp. Byers, D.C., D.D. with boiler.
1—7 x 10 Lidgerwood, D.C., D.D. with boiler.
1—8¼ x 10 Lidgerwood D.C., D.D. with boiler.
2—10 x 12 Lambert, D.C., D.D. with boiler and separate swingers.
2—8¼ x 10 Lambert, D.C., D.D. with boilers.
20—Other hoists, ranging in size from 4¾ x 6 to 10 x 12—various makes.
3—Dake Swinging engines No. 11084.
2—9 x 12 National D.C., 3D, 40-HP. with separate swinger.

GASOLINE HOISTS

1—6-HP., Novo, single drum, reversible.
1—5-HP., C. H. & E., single drum, reversible.
1—5-HP., Ideal, single drum, reversible.

AIR COMPRESSORS

1—20 Hp. Portable Sullivan gasoline.
1—Portable Chicago gasoline driven, 250 cu.ft.
1—Ingersoll-Rand Portable Steam, 10 x 10.
1—Ingersoll-Rand Gasoline Portable, 120 cu.ft.
2—Quincy Portable gasoline, 125 cu.ft.

DERRICKS

11—Stiff-leg Terry & Tench fittings, booms 14 x 14 x 60 with bull wheels.
1—All steel American stiff-leg 100 ft. sectional boom 30-ton cap with bull wheel.
1—Brand new stiff-leg derrick with 75-ft. boom clamshell bucket operating.
1—All steel stiff-leg derrick with 80-ft. boom.
1—Guy derrick, 18 x 18 x 83 ft. mast, 14 x 14 x 71 ft. boom.
1—Guy derrick, 12 x 12 x 50 ft. mast, 12 x 12 x 43 ft. boom.

CONCRETE MIXERS

5—½-yd. Mixers on trucks equipped with side loaders, steam engine and boilers.
3—¾-yd. Mixers of trucks with side loaders steam engines and boilers.
3—1-yd. Mixers on skids with batch hopper, with and without power.
7—1-sack Mixers on trucks with gasoline engine.
15—Mixers of various makes, ranging in size from 7 cu. ft., 1 yd., with and without power.

FOR SALE OR RENTAL

1—7 x 10 3 drum **Flory Skeleton Engine**, banked levers.
1—7 x 10 3 drum **American Hoist**, without boiler.
1—7 x 10 3 drum **Byers Hoist**, with boiler.
1—7½ x 10 2 drum **National**, with Massachusetts boiler.
1—6¼ x 8 2 drum **O. & S.** with boiler.
1—14 x 20 Standard ga. Vulcan Locomotive 2-4-2 type.
1—1-yd. Anderson-Evans **Clam Shell** bucket.
1—1-yd. Hayward **Orange Peel Bucket.**
1—1¼-yd. Hayward **Orange Peel Bucket.**
2—2½-yd. Haines-Weaver bottom dump **Buckets.**
1—1-yd. Haines-Weaver **Clam Shell Bucket.**
1—¾-yd. **Fogarty Bucket.**
1—¾-yd. **Ransome Mixer** with boiler, engine and pivot hopper, on wheels.
1—No. 2 Vulcan **Steam Hammer.**
2—600 gallon Austin **Sprinkling Wagons.**
1—Buckeye **Trench Digger**, gas driven for trench 15 in. x 5 ft.
1—Cylindrical **Water Tank** 5 ft. diameter 25 ft. long.
20—6-yd. St. Ga. 2-way **Cars**, Koppel, K. & J. and Western types.

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Equipment Department
Springfield, Mass.

Ditching Machinery

For Sale in South Texas.

Two Walking Ditching Machines (Cross Patent) with 1¼ and 1½-yd. dippers. Operate successfully on muck or hard soils. Also one Fairbanks 1¼-yd. **Floating Dredge.** All three machines have Foos improved 50 and 60-H.P. engines. Address

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Austin 00, Multipedal traction, gasoline engine in excellent operating condition, immediately available with efficient crew at Washington, D. C.

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Care of Benjamin Catchings
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1—9 x 12 Triplex Gear-Driven Pump, capacity 350 gallons per minute. Manufactured by Plattsburg Iron Works Co.
1—24-in. Downey double-acting steam pump head. 18 x 24 cylinders. For 400-ft. well.

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1—80-hp. Boiler, 44—4-in. flues; 72-in. square grate surface with Herringbone grates. Complete with water column, steam dome and 1¼ in. Penberthy Injector.

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1—Lidgerwood, 8 x 12 twin cylinder, double-acting mine hoist.

Above articles have been used, but are in good condition.

IDAHO IRRIGATION COMPANY, Ltd.
Richfield, Idaho

FOR SALE

LIDGERWOOD CRAWFORD CLASS B EXCAVATOR

60-ft. boom, 1½-yd. bucket.

TUG BOAT ENGINE

Fore and aft compound 12-in. stroke, 9-in. high, 18-in. low pressure cylinders.

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with frames, weights and engines.

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from single track steam railroad bridge—two each following lengths: 59 ft. 6 in., 70 ft. 3 in., 87 ft. 6 in., 91 ft. 6 in., 107 ft. 6 in., and all floor bracings.

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300 tons capacity; 90 ft. x 26 ft. x 6 ft.; first-class condition. Immediate delivery. Near New York.

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FLOATING STEAM DIGGER and DERRICK

with Clamshell or Orange Peel bucket attached.

Also 14B Bucyrus

STEAM SHOVEL

Also sand, cinders, dock, rip-rap and one-man stone.

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Odd lots which we offer at low figures for immediate clearance.

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No. 7 Knickerbocker, 7-hp. oil engine and Universal Tool Unit.

6-hp. American all-steel saw table, Novo engine, set of saws.

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20-hp. 500-volt D.C., with grids and controller.

Extra armature for same.

40-hp. 220-volt D.C. Maine motor, grids and controller.

MIXERS

½-yd. Ransome steam mixer on wheels, power loader.

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10-ton lattice steel, 40-ft. mast, 3-section 80-ft. boom, steel sills and stifflegs.

15-ton Oregon Fir guy derrick, 16-in.-18-in. round timbers. 90-ft. mast, 85-ft. boom.

CABLEWAY

400-ft. 2-in. Mead-Morrison sewer cableway less small lines.

HOISTS

7 x 12 Mundy D. C. D. D., with or without boiler.

6 x 8 Lambert D. C. D. D., with boiler.

SWINGERS

Lambert grooved friction swinger to fit 37-hp. electric hoist. Maine geared friction swinger to fit 50 hp. electric hoist.

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Extension shaft 17-ft. long geared to connect to 8¼ x 10 Lidgerwood hoist, two winch heads, bearings, etc.

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1¼-yd. Hayward class "G" clamshell, with manganese steel teeth.

¾-yd. Smith orange peel.

We can meet your requirements for any equipment in the above lines either from stock or for resale. Get our figures.

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ROLLERS

- 1—10-ton, 3-wheel, double cylinder, steam Kelly Road Roller.
- 1—10-ton, 3-wheel, four cylinder, gasoline Kelly - Springfield Roller
- 1—10-ton, 3-wheel, double cylinder, steam Kelly-Springfield Roller.
- 2—Buffalo-Pitts, 10-ton, 3-wheel, double cylinder, steam Rollers.
- 1—10-ton, 3-wheel, double cylinder, steam Monarch Roller.
- 1—12-ton, 3-wheel, Kelly-Springfield, single cylinder, steam power.
- 1—10-ton, 3-wheel, J. I. Case, steam roller.

STEAM SHOVELS

- 1—No. 3 Keystone Machine.
- 1—No. 0 Thew Steam Shovel, on traction wheels.
- 1—No. 1 Thew Steam Shovel, with long dipper arm for sewer work.

MISCELLANEOUS

- 1—**Western Elevating Grader,** complete with 32 hp. Gaar Scott Engine.
- 1—110-hp. J. I. **Case Hauling Engine,** with eight reversible Troy Dump Wagons.
- 20—45-ton **Hydraulic Jacks.**

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140 South Dearborn St., Chicago, Ill.

Single Drum, Reversible

Heavy 8½ x 12 Hoist

Drum 32 in. x 32 in., oscillating cyl. Fine order.

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Drawer 45, Syracuse, N. Y.

1—3 to 4 Yd.

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At a Bargain

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RATES:

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Rates for larger spaces furnished on application

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Good condition

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1—Austin 33-cu.ft. Cube Mixer.

HOLDING DRUMS

3—Lambert Type K-2 Holding Drums.

BUCKETS

3—Lockwood 1¼-yd. Concrete Buckets.

PUMPS

1—12-in. belt-driven Centrifugal, with engine.
1— 8-in. belt-driven Centrifugal, with engine.

ROAD ROLLERS

1—Case 10-ton Road Roller.
Prices submitted on application. No reasonable offer will be rejected.

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No. 12K GATES CRUSHER

Manganese fitted, Nickel steel shaft

$5600

- 10—**Crushers,** Nos. 2 to 12, mostly Gates.
- 2—**1500 cubic foot** duplex air comp.
- 1—**2570 cubic foot** comp. 2 stage, with 3 Ph., 500 H.P. motor, 2080 V. G.E.
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- 2—326 H.P., 180 lb. hor. **water tube boilers, $9 H.P.** Fine condition.

Send us your inquiries for used equipment.

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ROAD EQUIPMENT

- 1—10 x 20 Climax **Portable Crusher,** complete.
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- 1—10-ton 3-wheel Buffalo-Pitts **Roller,** just retubed.
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- 2—2½ Climax Rock Crushers in "A1" Condition.
- 1—35 H.P. Boiler and Engine, Derricks, concrete mixers, Koppel cars, boilers, compressors, etc.

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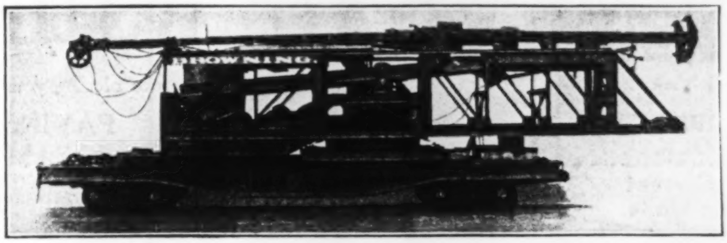

Modern Browning Pile Driver

Equipped with 3000 lb. Hammer. Splendid Machine. Immediate Delivery

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2—Osgood shovels, 3 yard dippers.
1—Modern 80-C Bucyrus, 4 yard dipper.
3—Marion Model 60.
3—Atlantic type, 2½ yard dippers.
1—Bucyrus 45, 2 yard dipper.

CARS

25—Western steel underframe 12-yd. and 16-yd. dump cars.
30—Oliver 12-yd. dump cars.

ALSO

LOCOMOTIVES

Narrow and Standard Gauge

All in Stock in Atlanta

SOUTHERN IRON & EQUIPMENT CO., Atlanta, Ga.

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New and Second-Hand

Steam Shovels
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General line of contractors and mine supplies and equipment

Send Us Your Inquiries.

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Bellwood, Pa.

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Road Building Equipment

2—Buffalo-Pitts, 10-ton, 3-wheel Steam Rollers.
2—Kelly, 3-wheel, 10-ton Steam Rollers.
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1—Kelly 10-ton, 3-wheel Gasoline Roller.
All late models with cabs and side Curtains.
1—Erie B Steam Traction Shovel, A-1 condition.
1—No. 3 Keystone Steam Excavator.
1—1½, 2 and 3-in. No. 1 Iron Pipe.

All in first-class used condition. Prices right. We have all kinds of Road Equipment. Immediate shipment.

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EDWARD JOBBINS
Marquette Bldg., Chicago, Ill.

ROAD EQUIPMENT

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1—6-ton steam roller Erie tandem, new in 1916. Indiana.
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40—Western steel frame dump cars 1½-yd. capacity. Illinois.
1—McMyler Locomotive Crane, full revolving, 30-ft. boom, ¾-yd. clam shell bucket. Missouri.
Wire or Write.

LEONARD F. SMITH & COMPANY
South Bend, Indiana.

ROAD ROLLERS

3—Buffalo-Pitts 3-wh., 10-ton Road Rollers.
2—Buffalo-Pitts 3-wh., 12-ton Road Rollers.
1—Buffalo-Pitts Tandem 6-ton Road Roller.
2—Kelly-Springfield 3-wheel, 10-ton
1—Kelly-Springfield Tandem 6-ton
1—Monarch 3-wheel, 10-ton Road Roller.

EXCAVATORS

1—Keystone Excavator Shop No. 133.
1—Keystone Excavator Shop No. 328.

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1—Marion No. 31 Steam Shovel with extra drag line boom.
4—0 Thew Revolving Steam Shovels.
Also a complete line of hoisting engines, crushers, concrete mixers, air compressors, locomotives, dump cars and track.

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Race 1249 — Phones — Spruce 3392

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PAVING MIXERS

Three Austin Cube Mixers, 1918 model, steam engine and boilers, booms and buckets, capacity 14 cu. ft. dry material. Two at $1550 each and one at $1100, f.o.b. cars; condition very good.

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Steam Road Rollers and Paving Mixers

We have several, in excellent condition, ready for shipment.

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Alternating Current Reciprocating Units

60 Cycle

1—450 Kw. Gen. Elec., 2300 volt, 100 r.p.m., dir. conn. to 22 in. and 42 in. x 48 in. E. P. Allis cross compd. engine.
2—340 Kva. Westg., 220 volt, 150 r.p.m., Engine type. No engine.
1—325 Kva. Gen. Elec., 2300 volt, 120 r.p.m. dir. conn. to 24 in. x 36 in. Cooper Corliss engine.
1—300 Kw. Gen. Elec., 2300 volt, 150 r.p.m., dir. conn. to 18 in. and 30 in. 22 in. McEwan T.C. non-condensing engine.
1—120 Kw. Bullock 2400 volt, 277 r.p.m. Engine type. No engine.
1—50 Kva. Fairbanks-Morse, 2300 volt, 300 RPM. Engine type. No engine.
1—50 Kw. Ft. Wayne, 2300 volt, 300 r.p.m., dir. conn. to 11 in. x 12 in. Chuse, RH, horiz. 4-valve engine.

Oil Engine Unit

60 Cycle

1—125 Kw. Gen. Elec., 240 volt, 200 r.p.m., dir. conn. to 14 in. x 21 in. Diesel 3-cyl. vertical oil engine, type A-3, complete with all usual appurtenances.

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250 Volts

1—850 Kw. Westinghouse, 16 pole, 90 r.p.m., dir. conn. to 26½ in. and 44¼ in. x 48 in. Allis-Chalmers C.C. engine.
1—500 Kw. Ft. Wayne, MPL, 10-pole, 90 r.p.m., dir. conn. 22 in. and 38 in. x 48 in. Bates C. C. engine.
1—75 Kw. Bullock, 6-pole, 275 r.p.m., dir. conn. to 11 in. and 18 in. x 11 in. Shepherd vertical engine.
1—60 Kw. Thompson-Ryan, 10-pole, 275 r.p.m., dir. conn. to 13 in. x 12 in. McEwen engine.

125 Volts

1—150 Kw. Crocker-Wheeler, CCD, 125 vole, 8 pole, 225 r.p.m., dir. conn. to volt, 8 pole, 225 r.p.m., dir. conn. to engine.
1—50 Kw. General Electric, 120 volt, 6 pole, 275 r.p.m., dir. conn. to 13 in. x 17 in. Armington & Simms horital engine.
1—50 Kw. Bullock, 120/125 volt, 6 pole, 275 r.p.m., dir. conn. to 12 in. x 12 in. Payne horizontal engine.
1—30 Kw. Westinghouse, 125 volt, 352 r.p.m., dir. conn. to 9 in. x 15 in. x 9 in. Westinghouse automatic engine.

Gas and Oil Engine Units

Direct Current

1—160 Kw. Bullock, 250 volt, 160 r.p.m., dir. conn. to 16 in. x 24 in. Diesel vert. 3-cyl. oil engine.
2—150 Kw. units, each consisting of one 150 Kw. Ft. Wayne gen., 250 volt, 165 r.p.m., dir. conn. to 16 in. x 24 in. Diesel vert. 3-cyl. oil engine.
1—130 Kw. Crocker-Wheeler, CCD, 250 volt, 225 r.p.m., dir. conn. to Alberger size No. 16 Buffalo twin tandem gas engine.
1—7¼ Kw. Fairbanks-Morse, 110-115 volt, 350 r.p.m., dir. conn. to 8 in. x 10 in. Fairbanks-Morse vertical gas engine.

We shall be glad to mail complete list of Electrical, Steam and Hydraulic Machinery upon request.

Pittsburgh Office:
498 Union Arcade Building

ROAD ROLLER BARGAINS

1—10-ton Kelly 3-Wheel, Gasoline.
1—10-ton Kelly 3-Wheel, Steam.
1—10-ton Kelly 3-Wheel, Steam, with Scarifier.
1—10-ton Huber 3-Wheel, Steam.
3—10-ton Buffalo-Pitts, 3-Wheel, Steam.
1—6-ton Buffalo, Steam, Tandem.

All in A1 condition, for Immediate Delivery.

The T. J. LANE EQUIPMENT CO.
1026 West Main St., Springfield, O.

ROAD BUILDERS

Look over our stock before placing your order for

ROAD ROLLERS
CRUSHERS
PAVING MIXERS
STEAM SHOVELS

We **Rebuild** all of our equipment. Prompt shipments assured.

We also have complete line of

Hoisting Engines, Locomotives, Cars, Concrete Mixers, Air Compressors, Boilers, Pumps, Buckets, etc.

WE BUY WE SELL WE RENT
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PITTSBURGH MACHINERY & EQUIPMENT CO.
Fulton Building, Pittsburgh, Pa.

FOR SALE

1—6-ton Buffalo-Pitts Tandem Roller.
1—10-ton Monarch Road Roller.
1—Milwaukee Steam Traction Concrete Mixer, with boom and bucket.
9—Dump Wagons.
1—Little Winner Road Machine.
1—Adams Combination Scarifier and Scraper, with adjustable Engine Pole.

E. McGREEVY, Agt.
309 Robinson Bldg., Elmira, N. Y.

FOR SALE

2 Jewel Continental

FILTERS

size 10-ft. 6-in. x 9-ft.; mechanical rakes, motor, etc., complete and in excellent condition.

TIFFIN WATER WORKS
Tiffin, Ohio

FOR SALE

COMPLETE ROAD BUILDERS' OUTFIT

TRACK

50,000 feet Koppel Industrial road builders track, 24 in. gauge, sections 15 ft., 6 and 7 ties, 20 lb. rail.

CARS

150 Koppel Cars, 24 in. gauge, 1½ yard capacity, spring couplers, extra heavy construction, brass journals, "V" shape body.

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2 Plymouth gasoline operated locomotives, 24 in. gauge.

1 Whitcomb gasoline operated locomotive, 24 in. gauge.

STEAM SHOVEL PLANT

1—70C BUCYRUS SHOVEL, new 1912. Used approximately 4 months.

2—4 wheel, saddle tank, 36 in. gauge PORTOR LOCOMOTIVES. Excellent condition.

30—2-way WESTERN DUMP CARS, 4 yard capacity, 36 in. gauge. Steel underframe. Excellent condition.

10—16 yard air dump, steel underframe WESTERN CARS. Excellent condition.

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BROWNING LOCOMOTIVE CRANE 20 ton capacity, 50 ft. boom, 8 wheel M. C. B., steam brakes. Massachusetts-Ohio standard boiler, full cab. Excellent condition. Located Chicago.

CHESTER A. PHILLIPS & CO.
Old Colony Bldg., Chicago, Ill.

Paving Mixer for Sale

Smith-Chicago Paving Mixer No. 509 Steam. Almost new, bargain price, ½-yd. capacity.

BROWN & CO., Henderson, Ky.

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16 ft. dry capacity with Engine, Boiler, Boom and Bucket at Morton Terminal, Albany, N. Y., bought new 1916—used 4 months, needs cleaning and few repairs—$900.00.

J. M. TREVOR COMPANY
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For Sale for Prompt Stock Shipment

Stock No.

AIR COMPRESSORS

156 Sullivan, 396 cu.ft. steam driven, class W. B. 2, 2-stage air cylinders, size 12-14-9 x 11.

BOILERS

163 75 H.P. Scotch; dry back, corrugated furnace butt strapped; 125 lb. working pressure.

167 60 H.P. Ames Portable Return Tubular; 100 lb. pressure.

103 Two 80 H.P. Heine, water tube; new 1911; used 6 years, Maryland Casualty Co. certificate; 180 lb., 1 drum, butt strapped.

107 150 H.P., 125 lb. pressure, horizontal tubular, 72 in. x 18 ft., full front, complete including stack, new 1916, used 2 years; Hartford certificate.

173 100 H.P., 125 lb. pressure, horizontal tubular, 66 in. x 16 ft., full front, complete.

BRICK MACHINERY

168 Complete new plant; capacity 40,000 brick per day; "Special Imperial" Brick Machine, Brick Table, Side-Cut Die, Disintegrator, Granulator, Boiler, Engine, ten steel cars, etc. Will sell all or any part.

CARS

364 10 single deck all-steel new brick.

365 Single-track transfer, for hauling cars; stock No. 364.

368 2 bottom-dump clay, 1 yd.

369 Standard gauge, platform 8 ft. x 10 ft., 6 ft. 6 in. x 8 ft. 3 in., 6 ft. 3 in. x 8 ft. 9 in.

370 5 Koppel, all steel, side dump, ¾ yd.; 24 in. gauge.

CRUSHERS

30 Jaw Type—No. 218, 30 in. jaws; and No. 207, 18 in. jaws, made by the Western Wheeled Scraper Company.

126 Jaw Type—5 in. x 14 in., with extra jaws.

161 No. 5 Austin Gyratory, No. 2591; capacity 15 to 30 tons.

384 No. 7½ Gates Gyratory, style D, capacity 90 to 150 tons.

Stock No.

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340 Two sets complete irons for guy derricks, including galvanized guy lines.

DRYER

381 American Process Co., direct heat, 56 in. x 31 ft. complete; almost new.

DRAG LINE BUCKETS

119 1½-yd., 5 teeth, ¾ yd., 4 teeth, 1 yd., plain.

ELEVATORS

307 Chain Bucket—30 Buckets, 18 in. projection, 12 in. wide, 22 in. deep, complete, with framework.

316 Chain Bucket—50 Buckets, 24 ft. shaft, centers 6 in. projection, 6 in. deep, 10 in. wide, perforated front and back; one chain in center.

342 Belt Bucket—40 ft. centers, 14 in. belt, 108 buckets 14 in. wide.

GASOLINE ENGINES

132 15 H.P. Fairbanks-Morse, type Z, kerosene oil, stationary.

120 Fairbanks-Morse, 8 H.P. portable gasoline, on truck, steel wheels, friction clutch pulley.

383 Fairbanks-Morse, 10 H.P., portable, kerosene, on truck, steel wheels, friction clutch pulley.

HOISTING ENGINES

156 6 x 10, D.C., D.D., Stroudsburg, skeleton frame.

157 4—6 x 10 D.C., D.D., Stroudsburg, with boilers, complete.

329 Engine—First motion, reversible, double cylinder, 16 in. x 30 in., mine hoisting, double drums, wood logged, 5 ft. dia., 6 ft long.

MOTOR

377 60 H.P.—3 phase, 60 cycle, 220 volt, 690 R.P.M. slip ring, with sliding base, pulley, and starter

Stock No.

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245 Unusual bargain, 1000 ft.—2 in. black, 500 ft.—3 in. black, 500 ft.—5 in. black, 1500 ft.—6 in. black, 300 ft.—8 in. black.

PUMPS

290 Centrifugal—8 in. suction, 6 in. discharge, pulley 24 in. x 8½ in.

362 Pulsometer, 3 in.

228 Steam—5—3 x 2 x 3 Worthington Duplex, 1—4½ x 2¾ x 4 Duane Duplex, 1—7½ x 4½ x 10 Knowles Duplex, 1—14 x 9 x 18 Cameron single cylinder.

STEAM ENGINES

327 16 in. x 30 in., double, slide valve, throttling, wheel 12 ft. x 36 in.

9 Farquhar, 16 in. x 24 in., slide valve; wheel, 96 in. x 17 in.

352 American Blower Co., 3¼ x 3, type A, vertical enclosed, self-oiling, steam.

10 Tanner & Delaney, 12 x 18, center crank, slide valve.

STONE QUARRY TOOLS

159 5 surfacing machines, 50 plug drills, 100 hand carving tools, 100 stone axes, 50 spalling hammers, etc.

TANKS

36 Pressure: 6 ft. dia., 12 ft. 6 in. long, 5/16 in. thick, 2652 gallons.

332 Pressure: 24 in. x 10 ft.

136 7 enamel lined; dia., 8 ft.; height, 10 ft.; ¼ in. steel, closed tops, 3750 gals.

137 1 steel, cone bottom; dia., 9 ft.; height, 7 ft.; thickness, 3/16 in.; closed top, 3325 gals.

385 Pressure: 42 in. x 10 ft., 125 lb. air.

TRACTOR

104 50 H.P. Case, steam; engine 10 x 12—150 lb. pressure.

WIRE ROPE

151 Special bargain—1000 ft.—1¼ in.—6 x 19 plow steel.

IN TELEGRAMS AND CABLEGRAMS REFER ONLY TO STOCK NUMBERS

HACKLEY MORRISON COMPANY

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Cable Address
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CABLEWAY OUTFIT

1—900-ft. span Lidgerwood, 18-ton cableway, complete with 70-hp. Mass. Standard Boiler, 85-ft. towers, and all fittings. 1—Lidgerwood special 12 x 12 cableway engine.

DRAGLINE EXCAVATOR

1—500-ft. span Dragline Excavator, with towers, 1½-cu.yd. bucket, cables, complete.

1—90-hp. 2-drum 2-speed Thomas Electric Hoist, 220 volts, 3-phase, 60-cycle; motor suitable for excavator.

HOISTING ENGINE

1—10 x 12 Lidgerwood 3-drum skeleton hoist.
1—10 x 12 Lambert 3-drum skeleton hoist.
1—10 x 12 Mead-Morrison 3-drum skeleton hoist.
1—8¼ x 10 Lidgerwood 2-drum, with boiler.

LOCOMOTIVES

1—Vulcan 35-ton, 14 x 20, 0-4-0 Std. gauge, Airbrakes.
1—Plymouth 3½-ton, Std. gauge. 1 Bell 6-ton, Std. gauge.
1—American 10 x 16, 36-in. gauge. 1 Bell 4-ton, 24-in. gauge.

DERRICK

1—Traveling Derrick, 90-ft. boom, complete.

BOILERS

2—50-hp. Portable Locomotive type, Mass. Std.

HUBBARD-FLOYD CO. Inc.

Main Office: 90 West St., New York City. **Boston Office: Old South Building**

Get your copy in early—

Owing to the holiday next week, the forms for the Searchlight Section of the

July 3rd Issue

of

ENGINEERING NEWS-RECORD

will close for press at 4 P. M., Monday, June 30th.

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Buffalo-Pitts double cylinder 10-ton road

STEAM ROLLER

In A-1 condition Shop No. 9130.

JOSEPH A. MURPHY
Irvington, N. Y.

Koehring Mixer Bargain

½-cu. yard capacity. Used about six weeks. Outfit looks and is almost like new. Equipped with power loader and water tank. Guaranteed first-class condition. Can make immediate shipment. Price f.o.b. cars Milwaukee, $1300.

KERN-HUNTER, Inc., Milwaukee, Wis.

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FOOTE PAVER

27 ft. dry capacity, with engine, boiler, 18 ft. chute, late model, used one year, overhauled and ready to work, a bargain, located in Schenectady.

J. M. TREVOR CO.
50 Church St., New York, N. Y.

FOR SALE

Revolving Shovel, Dragline, Deck Scow, Motors, Pumps

175-B Bucyrus Revolving Shovel, 75 ft. boom; 3½ yd. dipper.

175-B Bucyrus Dragline, 125 ft. boom.

1—Steel Tug, 72 ft. long, 15 ft. beam; Lake Michigan.

1—500 ton Deck Scow for heavy derrick or whirlie use; reinforced concrete; Hunt inspection.

Various 60-cycle Motors.
Various Centrifugal Pumps, etc.

JAMES O. HEYWORTH, Harvester Building, Chicago

FOR SALE

1—Marion Model 60 **Shovel.**
20—K. & J. 6-yd. Std. Gage **Dump Cars.**
1—**Field Tower Dragline,** 2½-yd. Bucket.
1—5-ton Buffalo-Pitts **Roller.**
1—5C **Champion Crusher.**
1—Byers **Auto Crane,** Model B.
1—10-ton Iroquois **Roller.**
1—**Derrick Boat** with 1-yd. Clamshell.
1—**Motor Boat** 36 ft. long. Speed 18 Miles

J. T. WALSH
246 Tremont St., No. Tonawanda, N. Y.

STEAM SHOVELS and other equipment

Model 76 Marion Model 60 Marion
Model 41 Marion Model 0 Thew
3—Keystone **Excavators.**
125 HP. Ames Economic **Boiler.**
No. 5 Champion **Crusher.**
No. 3 Champion **Crusher,** elevators and screens.

Complete tunnel plant consisting of compressors, drills and all accessories.

ADVANCE MACHINERY COMPANY
1234 Real Estate Trust Bldg., Phila., Pa.

FOR SALE

Thew full swing traction A-1

STEAM SHOVEL

ready to run. No. 4 yd. dipper. Can give immediate shipment.

GENEVA LIMESTONE CO., Inc.
Oak Corners, N. Y.

FOR SALE

Byers Auto Crane, 35-ft. boom, ½-yd. bucket; first-class condition, ready for immediate shipment.

Quincy 100-ft. gasoline driven portable **Air Compressor.**

Allis-Chalmers 48 x 60 **Jaw Crusher.**

A-1 Thew traction **Steam Shovel,** shop No. 854.

Osgood Model 18 traction **Steam Shovel.**

15-ton Brown Hoist 8-wheel **Locomotive Crane.**

Chain-Belt No. 15 (mixed material) **Paver,** with boom and bucket.

2—Buffalo-Pitts 10-ton 3-wheel **Road Rollers.**

Locomotives, Cars of All Types, Steel Rails and Portable Track, Engines and Boilers, Portable Crushers, Unloading Plants, Hoisting Engines and Derricks.

Maryland Equipment & Supply Co.
Equitable Bldg., Baltimore, Md.

FOR SALE CHEAP

1—Knox Semi-Trailer, 10-ton capacity, steel tired, good as new, $600.

Bucket: 1¼-yd. Hayward Orange Peel Bucket, first-class usable condition, $700.

1—8¼ x 10 **Lidgerwood D.D. D.C. Engine,** with geared swinger and boiler, cheap, thoroughly overhauled.

1—No. 110 **Smith Tilting Mixer,** no power, arranged for either gasoline, steam or electric, with power charger; good usable condition.

Full Line of Other Equipment.

Brandeis Machinery & Supply Co.
325 West Main St., Louisville, Ky.

Miscellaneous Contractors' Equipment

Immediate Delivery
Attractive Prices

1—¾-yd. "Hayward" **Orange Peel Bucket.**
3—**Concrete Dump Buckets.**
2—¼-yd. "Lakewood" **Elevator Concrete Buckets.**
4—**Concrete Buggies.**
1—**Drop Bottom** Concrete Car.
"Harrington," "Box," "Yale & Towne" Chain **Hoists,** 4000 to 16,000 lb. capacity.
Concrete Mixers, 5 to 16 ft. capacity.
Gyratory and Jaw **Rock Crushers.**
1—Set of **Cutter Teeth for Hydraulic Dredge.**
1—Lot of **Wire Cable.**
1—Lot of **Chain,** assorted sizes.
5—"Chicago Pneumatic" **Coal Cutters.**
1—1/16-in. "Ingersoll-Rand" **Rock Drill.**
1—1-in. "Haeseler" **Air Drill.**
Number of "Keller" and "Oldham" **Pneumatic Hammers.**
1—Lot of **Suction Hose,** 3 to 10 in.
Several **Hydraulic Jacks,** 8 to 10 tons.
5—"Wells" Gasoline **Lights.**
1—"Anderson" Diamond **Stone Saw.**
2—"Oldham" Pneumatic **Stone Surfacers.**
1—**Painters Scaffold.**

Also a large stock of Hoisting Engines, Air **Compressors, Pumps, Electric Motors,** etc.

L. F. SEYFERT'S SONS, INC.
437 N. 3rd Street, Philadelphia, Pa.

48-TON STEAM SHOVEL

1½-cu.yd. Bucyrus, R.R. trucks, 280 deg. swing, new digging teeth, short rail sections. Guaranteed complete and in first-class condition.
For Rent or For Sale, $8000 f.o.b. Oak Ridge, N. J.

HEYMAN & GOODMAN CO.
15 Exchange Place, Jersey City, N. J.

CLAMSHELL BUCKETS

FOR SALE FOR RENT

NEW AND REBUILT

Rental on ½ and ¾-yd. buckets, $2.75 per day.
Rental on 1-cu.yd. buckets, $3.00 per day.

Send for Catalog.

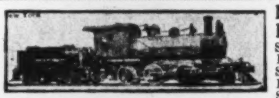
GEORGE HAISS MFG. CO.
140th St. and Rider Ave., New York City

BUCYRUS SHOVELS

Bucyrus steam shovel on locomotive trucks weight 65 tons, dipper 2½ yd.
Bucyrus steam traction, about 15 tons, dipper ½ yd.

Good condition, immediate shipment.

D. B. STRALEY, Crown Point, Ind.



Miller & Ross Co.
Sales Agent Erie Steam Shovel Co.; Electric Shovels.

Steam Shovels, Railroad Ditchers, Locomotives, **Cranes, Clam Shells, Draglines. Also New** and Second-**Hand Contractors' Railway Supplies and** Equipment
311-312 Atlas Block, Salt Lake City, Utah.

Rebuilt Equipment for Sale or Rent

AIR COMPRESSORS

(Belt Driven)
42—58-235-470-cu.ft.
(Steam Driven)
115—235-250-350-460-537-888-1200-cu.ft.

BOILERS

1—250-hp. Erie City Water Tube, two years old.
1—72 x 18, 150 lb.
2—72 x 18-in. Battery, complete, stack, heater, pump, etc., 2 years old.
1—150-hp., Locomotive Type, 125 lb.
1—125-hp., Locomotive Type, 125 lb.
2—100-hp., Locomotive Type.
3—70-hp. Economic.
15—Locomotive Type, 20 to 50-hp.
50—Vertical Boilers, 8 to 50-hp.

BUCKETS

1—2½ and 4-yd. Dragline Buckets.
1—1 and 1½-yd. Clamshell.

CONCRETE MIXERS

1—No. 2 Koehring Paver, boom and bucket.
4—No. 14 Koehring Pavers, boom and bucket.
1—No. 15 Chain-Belt Paver.
10—No. 6 Koehring Paver.
2—½-yd. Milwaukee, with side loaders and power hoists, electric drive.
3—½-yd. Marsh-Capron, with side loaders, electric drive.
24—Mixers, 4 to 27 ft. capacity, gasoline and steam.

ELECTRIC

A.C. Motors, 1 to 200-hp., 60-cycle, 2 and 3-phase, 220-440-volt.
—50-kw. Turbo-Generator, 125-volt.

CRUSHERS

1—No. 4 Champion, with engine, boiler, elevator and bin.
1—No. 5 Champion.
2—Coal Crushers, 100 and 200-ton capacity.
1—36-in. Stedman Pulverizer.
1—30 x 8-in. Kennedy Pulverizer.

CARS

10—1½-yd., 24-in. gage Koppel.
11—4 -yd., 36-in. gage K. & J.
20—4 -yd., 36-in. gage Western.
6—6 -yd., Standard gage.
2000 ft., 24-in. gage Track.

CRANES

1—15-ton, 4-wheel
1—15-ton, 8-wheel
1—20 ton, 8 wheel
1—50-ton Wrecking Crane.

LOCOMOTIVES

3—3½-ton, 36-in. gage Milwaukee, gasoline.
1—3½-ton, 36-in. gage Whitcomb, gasoline.
1—6 x 10, 16-ton, 24-in. gage American.
1—8 x 14, 10-ton, 36-in. gage Porter.
8—9 x 14, 14-ton, 36-in. gage Porter and Vulcan.
3—10 x 16, 18-ton, 36 in. gage Davenport.
1—10 x 16, 18 ton, 36 in. gage American.
1—10 x 16, 20-ton, standard gage Porter.
1—10 x 16, 22-ton, standard gage Vulcan.
1—17 x 24, 0-6-0, standard gage American, saddle tank.

ROLLERS

2— 5-ton Tandem.
1— 6-ton Tandem.
3—10-ton, 3-wheel.

STEAM SHOVELS

1—Marion Model 28 traction.
1—Marion Model 31 traction.
1—Marion Osgood Model 18 traction.
1—Erie traction.
1—No. 0 Thew traction.
1—Marion 25 Tunnel.
1—Marion Model 60.
—Bucyrus, 70 ton.

HOISTING ENGINES

58—In stock with one, two or three drums, for derrick, mine, incline, pile driving or cableway service. Sizes 5 x 6 up to 10 x 12.

PUMPS

150—In stock including triplex, centrifugals, Emersons, Pulsometers and Nye.
Steam, Motor, Belt, Gasoline Driven.

TANKS

25—Pressure Tanks, 24 to 72-in. diam., 4 ft. to 20 ft. long.
100—Steel storage Tanks, all sizes up to 40 x 40 ft.
1—50,000 gal. Steel Tank and Tower for water supply.

STEEL STACKS

30, 36, 40, 60, 66-in. diameter.

Ask for. 25-page Stock List

We recently purchased several large Industrial Plants and can make attractive prices on all kinds of machinery, equipment and supplies.

WIRE PHONE WRITE

CONTRACTORS MACHINERY & SUPPLY CO.

509-11 Wabash Building, Pittsburgh, Pa.

ERIE STEAM SHOVELS

Two ¾-yd., full revolving, on traction wheels. Very good order. Prompt shipment.

Also several **Osgood, Thew, Marion and Bucyrus**, ⅝ to 1¼-yd.

WM. B. GRIMSHAW CO.
1040 Drexel Bldg., Philadelphia, Pa.

FOR SALE

1—"O" Thew Revolving **Traction** Shovel, with ⅝-yd. dipper.
1—6-A Foote Steam Traction Concrete Mixer, with chute.
1—Milwaukee Steam Traction Concrete Mixer, with boom and bucket.
1—10-ton Buffalo-Pitts Steam Roller.
1—2½ Climax Portable Crusher, jaws 10 x 20, complete with folding elevator, 30-ton portable bin with screens.

E. McGREEVY, Agt.
309 Robinson Bldg., Elmira, N. Y.

¾-YD. ERIE "B" SHOVEL

1—Erie "B," ¾-yd. full revolving traction type shovel, Shop No. 165, complete with Ohio boiler, butt strapped, triple riveted, No. 125 working pressure, manganese lip and teeth on dipper, first-class working order, used about ten months, as good as new.

Marsh-Bothe Machinery Company
975 Old Colony Bldg., Chicago, Ill.

Contractors' Tools

In stock at our warehouse

Several hundred New and Used

Picks and Shovels

and Miscellaneous small Tools at considerably under new prices

E. H. WILSON & COMPANY
COMMERCIAL TRUST BUILDING
PHILADELPHIA

STEAM SHOVELS

1—No. 1 Shipper Shaft Boom, Thew Automatic Traction Shovel, shop No. 834, used only on one job, good as new.
1—No. 1 Trolley Boom Thew Automatic Shovel, shop No. 538, new boiler and new boom, first-class condition.
3—Special Thew "O" ¾-yd. Dipper, high lift, counter weighted for deep trench work, shop Nos. 1320, 1321 and 1322, first-class condition, will load wagons on bank in 14-ft. cut.

LOCOMOTIVE

1—Vulcan narrow gauge Locomotive, 12 tons, cylinders 9 in. x 13 in., good working condition.

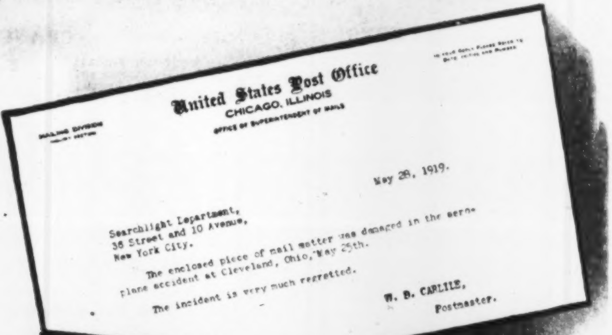
ROAD ROLLERS

1—10-ton Buffalo-Pitts Roller, new, used only on one job, good as new.
1—12-ton Julian Schoel Road Roller, good condition.

CARS, RAILS, ETC.

5—Two-way Continental Dump Cars, good condition.
About 1 mile of 40-lb. Rail, including Switches, Fish Plates and Ties, good condition.
2—Pierce, 5-ton Sand Trucks, nearly new.
1—No. 10 Sunbury Automatic Car Unloader, never used.

JOSEPH F. STABELL CO.
1105 Niagara St., Buffalo, N. Y.



United States Post Office
CHICAGO, ILLINOIS
OFFICE OF SUPERINTENDENT OF MAILS

MAILING DIVISION

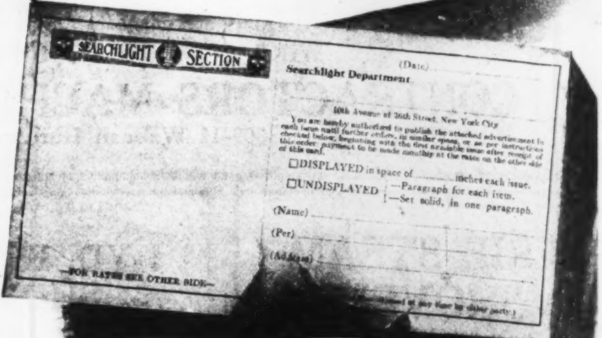
May 28, 1919.

Searchlight Department,
36 Street and 10 Avenue,
New York City.

The enclosed piece of mail matter was damaged in the aero-plane accident at Cleveland, Ohio, May 25th.

The incident is very much regretted.

W. B. CARLILE,
Postmaster.



SEARCHLIGHT SECTION

(Date) ....

Searchlight Department

10th Avenue at 36th Street, New York City

You are hereby authorized to publish the attached advertisement in each issue until further orders, in similar space, or as per instructions checked below, beginning with the first available issue after receipt of this order; payment to be made monthly at the rates on the other side of this card.

☐DISPLAYED in space of .... inches each issue.
☐UNDISPLAYED —Paragraph for each item.
—Set solid, in one paragraph.

(Name) ....
(Per) ....
(Address) ....

—FOR RATES SEE OTHER SIDE—

Wherever the mail goes "SEARCHLIGHT" Advertising goes

Even the swift Post-Planes carry the message of "Searchlight" advertising. And swift are the results for advertisers who use the "Searchlight" to tell readers of McGraw-Hill papers their needs or business propositions.

Quickly following the printing of a Searchlight advertisement, machinery or equipment has been rented or sold, positions found or filled, money-saving bids received from Official Proposal advertising and other worth-while results secured.

Over 160,000 men in 10 big engineering fields look to the "Searchlight" for the advertising of current "Opportunities" in their industries. That's why it pays to "Think SEARCHLIGHT First!"

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For Highest Results Advertise and Find Your "Opportunities" in the

SEARCHLIGHT SECTION

FOR SALE OR RENT

Owned by Us and Sold Under Absolute Guarantee

ROAD BUILDING EQUIPMENT

1—10-Ton Austin Gasoline Road Roller, slightly used.
1—12-ton Austin Gasoline Road Roller.
7—3-yd. Troy Reversible Dump Wagons
23-1½-yd. and 2-yd. Western Bottom Dump Wagons; practically new

STEAM SHOVELS

4—70-C Bucyrus, shop Nos. 1474, 1371, 1126, 2½-yd. dippers.
1—Model 70 Marion Steam Shovel, Shop No. 2694, 3-yd. dipper.
1—Model 60 Marion, Shop No 2079, 2½-yd. dipper
1—Model 76 Marion Special, shop No. 2777. Equipped with both 2½-yd. and 3-yd. Manganese faced Dippers. Clear height of lift 21 ft. length of boom 35 ft.; length of dipper arm 24 ft.
1—45-C Bucyrus, shop No. 1202 1½-yd. dipper.

REVOLVING TRACTION SHOVELS

2—Model 28 Marion Revolving Traction Shovels, ¾-yd. dippers; Shop Nos. 2803 and 2804
1—Erie B Revolving Traction Steam Shovel, ¾-yd. dipper. Shop No. 149
1—Model 18 Marion-Osgood Shovel, Shop No. 521, ¾-yd. dipper.
1—Bucyrus 18-B Revolving Traction Shovels ¾-yd. dipper, Shop Nos. in 2100 series.

DUMP CARS

100—12-yd. standard gage Western air dump cars
20—12-yd. standard gage Oliver side dump cars
18—16-yd. standard gage Western Side Dump Cars.
2—6-yd. standard gage K. & J. side dump cars.
40—4-yd., 36-in. gage Western.
75—4-yd. heavy duty Western, 36 gage, side dump cars.
20—2 yd., 24-in. gage Western Side Dump Cars, steel frames
20—1½-yd., 24-in gage Western Dump Cars.

LOCOMOTIVES

1—17x24 cylinder, Schenectady 6 wheel switcher with tender. Weight 43 tons on drivers; 44 in. wheel centers; 11 ft. rigid wheel base; 150 lb. steam pressure.
1—16x22 cylinder, 32 ton, 4-wheel switchers with tenders, C. M. & St. P. Ry., class J2 locomotives.
1—10 x 16 cylinder, standard gage, Porter, saddle tank locomotive (042 type) weight 21 ton, with 18 ton on drivers; air brakes and automatic couplers.
5—36-in. gage, 10 x 16 cylinder Porter, 18-ton saddle tank Locomotives, Shop Nos. 5235, 5067, 4499, 4495 and 4260; extended saddle tanks, wide fire boxes, steam brakes and most modern design and equipment.
10—36-in. gage, 10 x 16 and 9 x 14 Davenport American and Vulcan saddle tank locomotives
1—7 x 12 cylinder, 24-in. gage Davenport, saddle tank locomotive. Weight 9 tons.

RAIL, SWITCHES, SPIKES, ETC.

1—Carload 4½, 5 and 5½-in. spikes.
10 tons angle bars for 70-lb. and 75-lb. rail.

BOILERS, MIXERS, DERRICKS, COMPRESSORS, Etc.

3—Brownell, 72-in. x 18-ft. Horizontal Tubular Boilers, with 4-in. tubes.
1—20 x 22½ x 15½ x 21 AA2 Ingersoll-Rand Compressor. 1600 ft. capacity.
1—66 x 18 vertical air receiver, complete.
1—30 x 6 vertical air receiver, complete.
1—16 x 16 x 18-in. Laidlaw-Dunn-Gordon Air Compressor with reservoir, weight 15,000 lb
1—Stationary Engine, horizontal center crank type, 10 x 12-in. cylinder, slide valve type, 25 hp.
2—Milwaukee (16 cu.ft.) Mixers.
1—American 10-ton Derrick, 60-ft. boom, 12-ft circle.
1—American, 10-ton Derrick. 76-ft. boom, 12-ft. circle.
3—1-yd. Concrete Buckets.
6—24-in. gage, 1-yd. Koppel Cars, approximately 1000 ft. 24-in. gage Koppel track.
1—No. 44 Koehring Concrete Mixer.

CLAPP, NORSTROM & RILEY EQUIPMENT CO.

12 and 14 South Canal St., Chicago

Northwestern Branch: 1308 Pioneer Bldg., St. Paul, Minn.

FOR SALE OR RENT

HOISTING ENGINES

2—8½ x 10 Lidgerwood, D.C., D.D., skeleton
1—7½ x 10 Lidgerwood, D.C., D.D. skeleton
2—6-hp., 1—8-hp. Boss Gasoline Hoists.
1—Mead-Morrison Independent Swingers.

BUCKETS

1—Smith ½-yd. orange peel
4—½-yd. Contractors tip-over Buckets
10—1-yd. Contractors tip-over Buckets

STIFF-LEG DERRICKS

1—5-ton stiff-leg Derrick, 48-ft. boom
1—2-ton hand Derrick
1—Complete set of Lambert Stiff-Leg Derrick Fittings, 14 x 14 boom.
1—Set of Terry & Tench, 3-ton Travelling Derrick Fittings, with bull wheel and double flanged car wheels

PUMPS

1—No. 7 Pulsometer Pump, rebuilt
1—Each Nos. 4, 5 and 6 Pulsometer Pumps
1—No. 4 Emerson Steam Pump, complete.
1—No. 5 Emerson Steam Pump, complete.
1—6-in. Morris Centrifugal Sand Pump.
1—4-in. Suction Nye Pump.
1—3-in. suction Nye Pump.

ROAD ROLLERS

2— 5-ton Tandem Iroquois
1—10-ton, 3-wheel Ohio gasoline Roller.

KOPPEL CARS

6—36-cu.ft. capacity, 30-in gage, two way.
3—24-in. Rotary Dump Cars

CONCRETE MIXERS

2—½-yd. Smith, with steam power.
1—½-yd. Lakewood on trucks with steam engine and batch measuring hopper.
1—22-ft. Boss Mixer.
2—8-ft. Boss Mixers, gasoline engine and barrow hoppers, on trucks
2—10-ft. Boss Concrete Mixers on trucks with gasoline engine
2—10-ft. Boss Mixers, gasoline engine, power loaders
1—15-ft. Boss Gasoline Engine and power loader

STREET PAVING MIXERS

1—No. 5 A Foote concrete mixer with chute loader and steam power.

ROLLERS

1—50-hp. Nagle Boiler, on wheels.
1—35-hp. O. & S. Boiler, on wheels.

EDWARD EHRBAR, Inc.

Phone, Canal 8473.

270 West St., New York City

HOISTING ENGINES

1—Lidgerwood 14 x 18, D.C. three tandem drums, suitable for cableway.
1—Shannon 7¼ x 10, D.C., D.D., with boiler.
1—Mundy 6¼ x 10, D.C., D.D. skeleton.
2—Mundy's 6¼ x 10, D.C., D.D., with boiler.

STATIONARY ENGINE

1—350-hp. Green Slide Valve Engine, equally as good as new, size 22-in. x 48-in., wheels 16-ft. x 32-in.

PIPE

4000-ft. strictly first-class 6-in. wrought steel pipe, equally as good as new.
1000 ft. strictly first-class 20-in. dia. steel riveted flange pipe, lengths 20 ft. each.

STEAM SHOVEL

1—65-ton Bucyrus, 2½-yd. dipper, standard gauge.

CENTRIFUGAL PUMP

1—Morris No. 12 14-in. suction, 12-in. discharge, direct connected to horizontal engine, 18 x 10, 4500 gallons capacity per minute.

RAILS

400 tons 70 lb. 200 tons 30 lb. First-class condition.
Also other weights from 20 to 100 lb.

HENRY A. HITNER'S SONS CO.
Gaul and Hazzard Sts., Philadelphia, Pa.

FOR SALE

1—7 x 10 D.C., D.D. Flory Hoist, 30-in. drums, with boiler. Fine condition.
1—No. 3 Marsh-Capron Concrete Mixer, complete with boiler and engine.
1—10-in. Goulds **Centrifugal** Pump, belt driven.
1—Size 6, Morris **Centrifugal Pump**, d.c. to steam engine with 65 ft. of 8-in. flange pipe.
1—8 x 5¼ x 3½ Gardner **Duplex** Pump.
1—20-hp. International Gas **Engine**.
1—5 x 5 **Steam** Engine.
1—90-hp. Horizontal Boiler.
1—**Stiff-Leg Derrick**, Mast 42 ft., Boom 55 ft., timbers 12 x 12.
1—1-yd. Hayward **Orange** Peel Bucket.

This equipment can be seen near Ft. Madison, Iowa. For further particulars address

Edmund T. Perkins Engineering Company
1211 First National Bank Bldg., Chicago

AMERICAN LOCOMOTIVE CRANE

10-ton, 47 ft. boom, single line, 4-wheel, st. gauge, overhauled; location, Cincinnati, Ohio.

MOORE BROS.
39 So. La Salle St., Chicago, Ill.

FOR SALE

50,000 ft. hoisting

ROPE

50,000 ft. guy rope.
Derrick lengths and sizes.

JOHN F. MEIGHAN
865 Third Ave., New York City

Wire Rope, Reinforcing Bars, Compressors, Tanks, Hoists, etc.

A. B. CLARK COMPANY
13 Park Row, New York City

Sound Plant in Good Operating Condition For Sale

PIPE

10,000 ft. 1½ in. iron pipe.

DRAGLINES

1—1¼ yd. Lidgerwood 60-ft. **boom.**
1—Monighan Walker 2 yd. 60 ft. **boom.**
1—3-yd. Dragline Bucket.

TRUCKS

6—4-wheeled House Moving Trucks.

LOCOMOTIVES

3— 9 x 14, 13-ton, H. K. Porter, **Dinkeys**, 36-in. gauge.
1—10 x 16, 18-ton, H. K. Porter, Dinkey, **36-in. gauge.**
1—10 x 16, 18-ton Vulcan Dinkey, 36-in. **gauge.**
2—20 x 26, 125-ton Brooks Locomotives, standard gauge.
1—15 x 24-in., 32-ton, 4-wheeled, standard gauge.

BOILERS

1—150-hp. R. T. Butt and Strap, **with front and fittings, 150 lb. pressure.**
3—50-hp. Locomotive type, on skids.
1—20-hp. Vertical type.
1—20 hp. Scotch Marine.
2—12-hp. Vertical type.
1—40-hp. Locomotive type, **on wheels.**

CRUSHERS

2—No. 3 B Gates Gyratory **Crushers.**
1—No. 6 B Gates Gyratory **Crusher.**
1—9 x 15 Blake Jaw Crusher.

CARS

14—Standard gauge, 6-yd., Peteler Dump Cars.

COMPRESSORS

2—18 x 18¼ x 24 Ingersoll-Sargent Steam Driven, straight line.
1—12 x 12 x 16 Duplex, Rand Steam Driven.

CONCRETE MIXERS

1—Ransome, 1-yd. on skids, with steam engine, but no boiler.

1600 sq. ft. of Blaw Panel Forms.

TOOL STEEL

2 tons Black Diamond flat tool steel.

STATIONARY STEAM ENGINES

11—From 1 to 60 hp.

ELECTRICAL MACHINERY

2—10-hp. A.C. Motors, 220 volts, 60 cycle, 3 phase.
1—20-hp. A.C. Motor, 220 volts, 60 cycle, 3 phase.
1—60-kw. Belt Driven Generator (Woods).

PUMPS

15—Force Pumps—from 20 to 600 gals. per min. capacity.
8—Centrifugal from 600 to 12,000 gals. per min. capacity.

HOISTING ENGINES

7—Hoisting Engines, from 5 to 20 hp.

STEAM SHOVELS

15—Steam Shovels—18 to 100-ton, with dippers ¾ to 3½ yd.
24—Steel Skips — extra strong, 3½-yd. capacity.
6—Steel Skips — extra strong, 1½-yd. capacity.

All thoroughly overhauled and ready for immediate and constant service.

UNITED STATES EQUIPMENT CO., 208 S. La Salle St., Chicago

Machiney For Saler

HYDRAULIC PUNCH

1—Watson-Stillman, size No. 3, depth of jaws 12½ in., cap. 1 in. through 1 in., weight 1450 lb. portable, mounted on small iron wheels.

BULL RIVETER

1—W. H. Wood Hydraulic Riveter, complete with accumulator, high pressure pump, container, and hydraulic hoist. Riveter has 8 ft. 3 in. gap.

RADIAL DRILL

1—American 42 in. Arm. 36 in. swing cone drive, worm movement. Swinging and tilting table.

BENDING ROLLS

1—Set 10 ft. 6 in. Power bending rolls with reversing mechanism, hand raising and lowering attachments. Top roll 12 in. diameter, bottom rolls 8 in. diameter double pulley drive.

PORTABLE PLATE RIVETER

1—Allen 72-in. Portable Pneumatic Hammer, boiler or plate riveter, capacity 1-in. rivets.

F. MAYER
737-738 Monadnock Bldg., Chicago, Ill.

FOR SALE OR RENT

LOCOMOTIVE CRANE

1—15 to 17-ton O. & S. 4-wheel standard ga.

Shop No. 43192, equipped with 40-ft. boom and 1½-yd. clamshell bucket.

EQUIPMENT CORP. OF AMERICA
Chicago Pittsburgh Philadelphia

MONIGHAN DRAG LINE

Type AI, all steel, self-propelling, 1-yd. Page bucket. Shop No. 1311; location, Chicago, Ill.

MOORE BROS.
39 So. La Salle St., Chicago, Ill.

FOR SALE—Approximately fifteen hundred tons of plain round

REINFORCING STEEL

in sizes from ⅜ to 1-inch. Also Some Squares and Deformed. Lengths up to thirty and forty feet.

All perfect condition. *Write or wire.*

OLE K. OLSEN
822 Perdido St., New Orleans, La.

TANKS

8—Tanks, 10 x 16-ft.
8—Tanks, 10½ x 16½-ft.
2—Tanks, 14 x 10½-ft.
1—Pressure Tank, 6½ x 24-ft.
All Stock for Immediate Shipment

PEERLESS IRON & METAL CO.
552 Penobscot Bldg., Detroit, Mich.

BLOCKS

Steel and Wood Tackle Blocks of all diameters. For immediate shipment.

WIRE ROPE, NEW AND USED

ATLANTIC EQUIPMENT COMPANY
Singer Bldg., New York, N. Y.

Offer for immediate shipment, the following

GIRDER BRIDGES AND TRUSS SPANS

from the Central Railroad of Pennsylvania. These girders are now dismantled ready for loading. Steel Girder, all Cooper E-35 with 33% overload allowance:

THROUGH PLATE GIRDER BRIDGES

2—27 ft. 6 in. bridges; 1—29 ft. bridge; 4—32 ft. 6 in. bridges.; 4—42 ft. 6 in. bridges; 2—54 ft. 2 in. bridges; 2—59 ft. bridges; 1—64 ft. 5 in. bridge; 2—64 ft. bridges; 2—64 ft. 11 in. bridges.

Total weight 771,034 *lb.*

DECK SPANS

1—24½ ft. 3—43 ft. 2—45 1/6 ft

Total weight 771,034 *lb.*

TRUSS SPAN

1—111 ft.

Weight 129,479 *lb.*

DECK SPAN (Viaduct)

12—30 ft. 2—43 ft. 2—60 ft

Total weight 265,850 *lb.*

Bridges located at Pittsburgh, Mill Hall and Bellefonte, Pa.
I will make attractive prices. Wire if interested.

M. K. FRANK Frick Building, Pittsburgh, Pa.

FOR SALE

STAR DRILLING MACHINES

1—No. 15, 1 No. 28 and several No. 22, 23 and 24s.

All in good working condition.
Attractive prices.

ARTESIAN WELL & SUPPLY CO.
Providence, R. I.

STEEL PILING

3,000 lineal feet Lackawanna and Carnegie, 23 to 32 ft. lengths; mostly 24 and 25 ft. Includes 23 corners and three-way pieces. Fine condition. Located Oklahoma point.

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135 Broadway, New York

FOR SALE IMMEDIATE DELIVERY F. O. B. CLEVELAND FOR SALE

We specialize in the rental of

ENGINES, MIXERS, DERRICKS and PUMPS

1—7 x 12 D.C., D.D. Mundy Hoisting Engine and boiler, reflued	$1,350
1—7¼ x 10 D.C., D.D. Mundy Skeleton Hoisting Engine with boiler space	1,050
2—7¼ x 12 D.C., D.D. Kendall Skeleton Hoisting Engines with boiler space, at	950
1—6 x 12 D.C., D.D. Kendall Skeleton Hoisting Engine with boiler space	650
3—2-line stiff legged **Derricks** with 51-ft. 10-in. boom, 56-ft. 4-in. boom and 55-ft. 3-in. boom, with wood bull wheels, load and fall blocks, each	700
2—2-line stiff legged **Derricks** with 79-ft. and 63-ft. booms, f.o.b. Chicago	650
1—200-hp. **Locomotive Boiler**, 113 lb. pressure	1,800
1—Port Huron Steam Traction Engine	$700
1—7 x 10 D.C., D.D. Rawson-Morrison **Skeleton**	950
1—7 x 10 D.C., D.D. Lambert with mechanical swinger and boiler, reflued	1,350
2—(1 link Reverse—1 Straight Line) 8¼ x 10 D.C., D.D. Flory **Skeleton**, link reverse, 27-in. drums, bank levers, each	900
1—12-ton Good Roads full telescopic **Stone Bin**, practically new, mounted, F.O.B. Cleveland	400
1—6-ton Erie Tandem **Steam Roller**, A-1 condition, F.O.B. Akron	1,350
1—10-ton Chicago **Steam Paving Mixer**, A-1 condition, F.O.B. Akron	1,500
9—1-yd. Maney 4-wheel **Scrapers**, F.O.B. Akron, each	225

The Day & Maddock Co., 1012 Washington Ave., Cleveland, Ohio

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LET US
INSTALL
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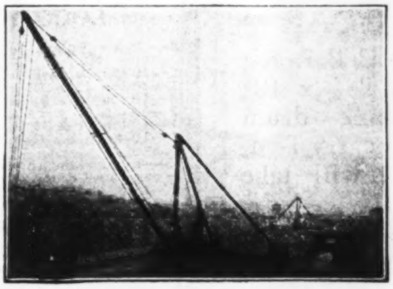
FOR YOU



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New methods must meet changed conditions. Are you ready to handle work quickly and efficiently? Let our engineers look over the situation and design the proper derric: equipment. Stocks are complete.

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"Mine, Mill and Construction Equipment"

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Arch and Park Way

CLEVELAND, OHIO
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Telephone, Ontario 218

STEAM SHOVELS

2—¾ yard Type B Erie Steam Shovels.

ROLLERS

1—10-ton Iroquois Macadam Roller.
1—5-ton Iroquois Tandem Roller.
1—Austin Combination Roller and Lawn Mower, (gasoline).

PAVERS

2—1/3 yard Austin Cube Pavers (steam) 20 ft., boom and bucket.
1—½ yard Koehring Paver, (Steam) boom and bucket.
1—1/3 yard Foote Paver, with 15ft. spout, (steam)

WATER WAGON

1—600 gallon Studebaker Sprinkling Wagon.

HOISTING ENGINES WITH BOILERS

1—6¼ x 10 D.C.D. Stroudsburg.
1—6¼ x 8 D.C.D.D. Lidgerwood.
1—6¼ x 10 D.C.D.D. Lambert.
2—16 h.p. D.C.D.D. Byers.
1—No. 3 Dake Swinging Engine.

PUMPS

1—Type B Emerson, Jr., Pump.
1—No. 3 Emerson Pump.
1—Wicks Cent. Pump, 8-inch suction, 6 inch discharge.

CARS

6—1 yard 36 in. gauge Koppel Cars.
2—1½ yard 36-inch gauge Koppel Cars.

MISCELLANEOUS

1—12-ton Champion Portable Stone Bin, elevator and screen.
1—9 x 15 Western Jaw Crusher on wheels.
6—1 yard Contractors Tip over buckets.
2—1 yard Ransome Controllable bottom dump buckets.
1—1/3 yard Contractor's tip-over buckets.

Everything for the Contractor
New and Used Bought and Sold

Empire Engineering & Equipment Co.
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BACK TO PRE-WAR PRICES

We must give up our large storage yard about twenty miles from New York City and have placed very low prices on the equipment stored there. If you are in the market for

Grab Buckets
Dump Buckets
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Stiff-Leg Derricks
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Send your inquiry to

EMPIRE ENGINEERING COMPANY, INC.
6 Church Street, New York City

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USED CONTRACTORS' EQUIPMENT

No. 2 Austin Gyratory Crusher. New, with elevator and buckets.
7¼ x 12, D.D., D.C. Mundy, with Boiler.
5¼ x 10, D.D., D.C. Mundy with Boiler.
7 x 10, S.D.S.C. Lidgerwood with Boiler.
No. 5 Dake Swinging Engine.
6-hp. Schramm D.D. Gasoline Hoist.
2—6-in. direct connected Morris Centrifugal Pumps, complete, with hose and suction.
40-hp. Upright Boiler.
20-hp. Upright Boiler.
35-hp. Farquhar Portable Boiler, with 30-hp. Engine attached, 100 lb. pressure.
Derricks, Gasoline and Steam Pumps.

Logan Construction Company, Inc.
Engineers and Contractors Steel and Concrete Construction
13 Park Row, New York City

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NEW—12 lb., 16 lb., 20 lb., 25 lb., 30 lb., 40 lb.
NEW—60 lb., 70 lb., 75 lb., 80 lb., 85 lb., 90 lb.
RELAYERS—30 lb., 35 lb., 40 lb., 45 lb., 56 lb., 60 lb.
RELAYERS—70 lb., 80 lb., 85 lb., 90 lb., 100 lb.
FASTENINGS—New Bolts. Nuts and Spikes.

New Frogs, Switches, Crossing, and All Accessories
Carload and less Carload. Rails cut to lengths for structural purposes.

Attractive Prices.
Immediate Shipments from Stock.

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1 inch—$4.00
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(The above rate applies to a 4-inch space in one issue, a 2-inch space in two issues, or a 1-inch space in four issues. The larger spaces following may be used up in a similar way.)

8 inches—$3.80 an inch
15 inches— 3.70 an inch
27 inches— 3.60 an inch
50 inches— 3.55 an inch

Rates for larger spaces furnished on application.

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All sizes, 30-80 lb.
For Industrial Purposes.
If you want them at a price,

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KOPPEL TRACK

9½ miles 20-lb. 24-in. ga.
69—1¼-yd. 24-in. ga. Koppel V shaped Cars.
2—6-ton 24-in. ga. Koppel steam locomotives.
2—24-in. ga. 6-ton Fate gasoline locomotives.

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Chicago — Pittsburgh — Philadelphia

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3000 tons of 70 lb. first-class
1000 tons of 40's
Located in the Eastern part of the State handy for export.

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36-in. gauge

PORTABLE OUTFIT

1800 ft. **Track** in 15-ft. sections.
2 **Turnouts** (right and left).
4 steel V-shape **dump cars**, 2-yd.
1 Milwaukee **gasoline locomotive.**
First-class condition, immediate shipment.

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25—20-yd. Cars. 18—16-yd. Cars.
35—12-yd. Cars. 20— 6-yd. Cars.
25—Western 4-yard Cars.
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7—Revolving Shovels.
3—Railway Shovels.
6—Locomotives.
22—Mile Rail.
3—Locomotive Cranes.

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McKEEN MOTOR CAR

1—200 h.p., in good condition, 84 seating capacity.
Price $9000 Cash or Part Approved Security. Address,

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FOR SALE CHEAP

DERRICK CAR

on standard M.C.B.R.R.; traction trucks 8¼ x 10; American double drum *hoisting engine,* carry 1-yd. bucket. $2000. will take whole outfit.

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118 N. La Salle St., Chicago

RAILS

200 Tons 20-lb. Relayers
125 Tons 30-lb. Relayers
25 Tons 50-lb. Relayers
200 Tons 70-lb New
40 Tons 85-lb. New
25 Tons 100-lb. Relayers
5700 Feet 24-in. Industrial Track.

STEEL PILING

2000 ft. Lackawanna Arch Web Piling, 25-ft. and 30-ft. lengths.

HENRY LEVIS & CO.
Commercial Trust Bldg., Philadelphia, Pa.

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50 tons 30s with bars.
350 tons 35s with bars.
75 tons 40s with bars.
Located in the South. Will make very low price for quick shipment.
Write or Wire

United American Iron & Steel Co.
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FOR SALE

1—7-in. x 12-in. Cylinder, 4-Wheel Saddle Tank, 36-in. Gauge

DAVENPORT LOCOMOTIVE

Practically New.

MESTA MACHINE COMPANY
P. O. Box 1124, Pittsburgh, Pa

STANDARD GAUGE LOCOMOTIVE

45-Tons, Four Driver Saddle Tank

New 1916. Immediate delivery.

E. C. SHERWOOD,
50 Church St., New York, N. Y.

STANDARD GAUGE LOCOMOTIVES

2—43-ton Vulcan four-driver saddle-tank, built 1917.
2—40-ton Baldwin four-driver saddle-tank.
1—20-ton 11 x 16 in. Vulcan.
2—18-ton 10 x 16 in. Porter.
1—50-ton 18 x 24 in. six-wheel switcher.
1—40-ton 17 x 24 in. four-wheel switcher.
1—10 x 16 in. 18-ton, 36 in. gauge Porter.
20—6-yd. standard gauge **Western dump cars,** steel draft sills.
1—Model 76 Marion **steam shovel.**
1—Western standard gauge **spreader.**
Locomotive Cranes, Steam Shovels, Narrow and standard gauge Cars, etc.

INDUSTRIAL EQUIPMENT CO.
McCormick Building, Chicago, Ill.

BROWN & SITES COMPANY
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—offer—

1800 tons NEW 16-lb. RAIL

In New York
For Immediate Shipment

Offered for prompt disposal considerably below the market price.

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FOR SALE

Locomotive Cranes, Derricks, Concrete Mixers, Steam Shovels, Locomotives, Cars, Rails, Hoisting Engines, Electric Hoists, Cableways.

All necessary equipment for complete plant.

JOHN M. GREENE
261 Drexel Bldg. - - Philadelphia, Pa.

STANDARD RAIL & STEEL CO.

1110 Boatman's Bank Bldg., ST. LOUIS, MO.

RE-LAYING RAILS

All Weights and Sections

Spikes, Bolts and Accessories

Buy and Sell
SCRAP IRON AND STEEL

FOR SALE

LOCOMOTIVES

- 4—20-ton 11 x 16 standard gauge 4-wheel Vulcan saddle tank locomotives, MCB Equipped, 165 lb. steam pressure, built 1915.
- 2—33-ton 13 x 18 standard gauge 4-wheel Vulcan saddle tank locomotives, MCB Equipped, 165 lb. steam pressure, built 1917.
- 1—55-ton 16 x 24 standard gauge 4-wheel Vulcan saddle tank locomotive, MCB Equipped, 165 lb. steam pressure, built 1912.

STEAM SHOVELS

- 1—40-R Bucyrus Steam Shovel, Shop number 1338.
- 1—70-C Bucyrus Steam Shovel, Shop number 1519.
- 2—Type B, Erie Revolving Shovels, Shop numbers 582 and 583.

LOCOMOTIVE CRANES

- 3—Brown Hoist 15-ton 8-wheel cranes, bucket operating, built 1916.
- 1—Browning 30-ton 8-wheel crane, bucket operating, built 1914.

MISCELLANEOUS

- 1—Type 00 Austin Trench Excavator, built 1918, nearly new.
- 1—Model 15 Koehring Paving Mixer, built 1918, nearly new.

NORTHERN EQUIPMENT COMPANY
844 Ellicott Square Bldg., Buffalo, N. Y.

SADDLE TANK LOCOMOTIVES

4-ft. 8½-in. Gauge

Two 30-ton, 13 x 18-in. Vulcan, built 1916. Fine condition.

Four 19-ton, 10 x 16-in. Vulcan. Overhauled and in splendid condition.

Many others, various gauges and weights.

Cars of all kinds, Relaying Rails, etc.

WM. B. GRIMSHAW CO.
1040 Drexel Bldg., Philadelphia, Pa.

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30,000 ft. of 20 lb. portable Track, 24-in. gage, in first-class condition.
50—1½-yd. Koppel Cars.
4—3-ton Plymouth Locomotives.
1—5-ton Whitcomb Locomotive.
1—¾-yd. Erie Steam Shovel.
Cars, Shovel and three of the Locomotives bought new little over year ago.

THE HILL DREDGING CO.
Somerset and Atlantic Aves., Ventnor, N. J.

Locomotives

Cars

Steam Shovels

Relaying Rails

Locomotive Cranes

Road Rollers

Concrete Mixers

60—24-in. Gage Koppel Cars

Spring Draw Bars, 1½ Yard Capacity, f.o.b. Chicago

We buy, sell and rent. If you have anything to offer list it with us. Anything you don't see listed write or wire us.

100 miles 2-in. used Iron Pipe, threads and couplings, in good condition. Pipe not pitted.

Full line of contractors' used equipment on application.

WM. BROCK GRIMES
555 Spitzer Bldg., Toledo, Ohio

SALE OF LOCOMOTIVE

belonging to the Navy at the Navy Yard, Brooklyn, N. Y. There will be sold one Locomotive, 4 wheel, saddle tank, standard gauge, weight 25,300 lb. Diameter driving wheels 28 in.; length over all 17 ft.; width 7 ft. 9 in., height 9 ft. 2 in. The terms of sale contain full specifications and description. The sale will be for cash to the highest bidder by sealed proposals received up to

10 A.M., July 10, 1919

at the office of the Senior Member, Board of Survey, Appraisal and Sale, Building 15, Navy Yard, Brooklyn, N. Y. The locomotive may be inspected and schedules containing forms of proposal and terms of sale obtained upon application to the above Board. Josephus Daniels, Secretary of the Navy.—6-9-19.

Locomotive for Sale

10 x 16—36 in. gauge Baldwin. Located Jersey City, N. J. Bargain price.

JAS. S. BRADEN
26 Cortlandt St., New York City.

NEW RAILS RELAY

FROGS AND SWITCHES
TRACK ACCESSORIES
MORRISON & RISMAN, Buffalo, N. Y.

100,000 Sq. Ft. NEW STEEL FACTORY SASH

Just Purchased from the Government

Manufactured by
David Lupton's Sons Co.

In original crates—Standard sizes—immediate shipment.

25,000 sq. ft. Steel Sash—Ventilating type—6 ft. x 7 ft. 5 openings wide, 4 openings high. Size openings 14 in. x 20 in.

75,000 sq. ft. Steel Sash—Stationary type—in three sizes—6 ft. x 7 ft., 5 ft. x 7 ft. and 3 ft. x 7 ft. 5 openings wide by 4 high. Also 5 openings wide by 3 high. Size openings 14 in. x 20 in.

Mullions can be furnished with above Sash.

LOW PRICE—QUICK ACTION.
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(Get our list of Steel Buildings, also available for immediate shipment.)

300 CONTRACTORS' DUMP CARS

One or all at a Bargain Price

We offer 300 Two-Way Dump Cars (Wood and Steel Construction). Heap capacity 1½ cubic yards, 20 in. gauge.

- 165—Western and Oliver, 12 yard all steel, either side standard gauge dump cars.
- 7—Steel Dump Cars, 36 in. gauge, two yard capacity, Koppel make.
- 17—Three yard Western Cars, including eight brake cars, 36 in. gauge.
- 25—Kilbourn & Jacobs wood body contractors' cars; capacity, 30 cubic feet; 24 in. gauge.

We have all kinds of contractors' supplies, as well as machinery and equipment of every description. Write for complete bulletin No. 307.

DERRICKS

- 4—12-ton cap. Power Guy Derrick; timbers in boom 12 in. x 12 in.; in mast 14 in. x 14 in.; length of boom 46 ft.; length of mast 50 ft.
- 1—12-ton cap. Full Circle Stiff Leg Derrick; length of boom 42 ft.; length of mast 50 ft.; 12 ft. diam. bull wheel, made of 6 in. x 4 in. angles. Complete with 7 in. x 10 in. double cylinder, double drum Flory hoisting engine with boom swinger and boiler.
- 1—15-ton cap. Stiff Leg Derrick, hand power, mast 24 ft. high, boom 36 ft. long. Equipped with double drum triple geared hand power hoist.
- 1—15-ton cap Stiff Leg Derrick, hand or power, mast 32 in. high, 16 in. x 16 in. timber; boom 48 ft. long, 14 in. x 14 in. timber.
- 1—Twin Stiff Leg Full Circle Double Derrick, cap. of each derrick 12 ton, mast 56 ft. high, boom 40 ft. long, 8 ft. dia., geared turntable. Each derrick is equipped with 6 in. x 8 in. double cylinder, double drum, geared vertical steam hoisting engine and boiler.

HOISTING ENGINES

- 1—9 in. x 10 in. Russell, double cylinder, double drum, skeleton frame.
- 1—7¼ in. x 10 in. Mundy, double cylinder, double drum, skeleton frame.
- 1—6¼ in. x 8 in. Flory, double cylinder, single drum, skeleton frame.
- 1—¼ in. x 8 in. Flory, double cylinder, single drum, with boiler.
- 1—5000 lb. cap. American, double drum Hoist, geared to a 10 H.P. electric motor.

PUMPS

- 1—12 in. Morris Sand and Dredging Pump.
- 1—8 in. Morris Sand and Dredging Pump.
- 1—24 in. Centrifugal Water Pump.
- 1—6 in. Centrifugal Water Pump.
- 1—4 in. Centrifugal Water Pump.
- 1— 8 in. x 12 in. Fairbanks Duplex Power Pump.
- 1— 4 in. x 4 in. Deming Triplex Power Pump.
- 1—18 in. x 14 in. x 10 in. Worthington Duplex
- 1—16 in. x 7 in. x 12 in. Stillwell Bierce Duplex
- 1—12 in. x 7 in. x 10 in. Worthington Duplex Pump
- 1—10 in. x 6 in. x 10 in. Prescott Duplex Pumps.
- 1—10 in. x 6 in. x 10 in. Prscott Duplex Pump.
- 2—5¼ in. x 3½ in. x 6 in. Worthington Duplex
- 2—4½ in. x 2¾ in. x 4 in. Worthington Duplex
- 1—10¼ in. x 7 in. x 18 in. Simplex Cameron

STEAM SHOVELS

- 12—70-ton Bucyrus Steam Shovels, standard ga.
- 4—95-ton Bucyrus Steam Shovels, standard ga.
- 1—No. 20 Marion, standard gauge.

Will rent or sell.

RELAYING RAIL

10 ton of 12 lb.
20 ton of 16 lb.
60 ton of 20 lb.
80 ton of 25 lb.
350 ton of 35 lb.
40 ton of 40 lb.
250 ton of 70 lb.
125 ton of 85 lb.
2500 pair Angle Bars for 70 lb. rail, 4 hole.
3 Mile Portable Track, 25 lb. rail with steel ties, 36 in gauge.
1 Mile of Portable Track, 20 lb. rail with steel ties, 36 in. gauge.

STONE CRUSHERS

- 1—No. 6 McCully Gyratory Stone Crusher.
- 1—No. 5-K Allis-Chalmers Gyratory Stone Crusher.
- 1—No. 3 Allis-Chalmers Gyratory Stone Crusher.

20 in. SPIRAL PIPE

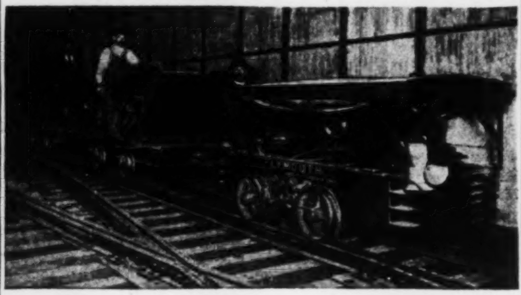
40,000 ft. 20 in. Spiral Pipe, No. 10 gauge with bolted joint couplings.

1—No. 5-B Eureka Jaw Stone Crusher, 8 in. x 24 in.

BOILERS

- 2—100 H.P. Marine Type, 125 lb.
- 1—100 H.P. Fire-Box, 90 lb.
- 1— 80 H.P. Fire-Box, 90 lb.
- 1— 45 H.P. Fire-Box, 90 lb.
- 1— 45 H.P. Vertical, 90 lb.
- 1— 20 H.P. Vertical, 90 lb.
- 1— 12 H.P. Vertical, 90 lb.

Harris Bros. Co.
35th and Iron St., CHICAGO



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Gasoline Locomotives

SOMEWHERE today—or in *many* places—"Plymouth" Gasoline Locomotives are making a thorough job of a haulage proposition much like your own.

Out-of-doors; inside of buildings; down in tight tunnels and mine chambers; high up on trestles—location doesn't bother "Plymouths" if there's work to be done there.

The new "Plymouth" Haulage Book tells the story with big, interesting pictures and valuable *facts*. Write for a copy, telling in detail about your own work.

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INDUSTRIAL CARS
For Every Requirement

Our Years of Experience and Manufacturing Capacity fit us as Competent Advisers on Every Haulage Problem. Catalogue on Request.

YOUNGSTOWN STEEL CAR CO.
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All sizes and types of light steam

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LOCOMOTIVE CRANES
Davenport Locomotive Works
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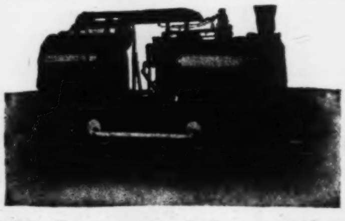
Steam and Compressed Air Locomotives

for all services, Reliable, Sturdy, Economical
Contractors' Dinkeys
Write us for printed matter covering the entire field
H. K. PORTER CO. **1202 Union Bldg.**
Pittsburgh, Pa.



Bell Contractors' Locomotives

This type of BELL LOCOMOTIVE is extensively used on sugar plantations where the fire hazard must be entirely eliminated. These compact BELL LOCOS are equally efficient on general contracting work.

Write TODAY for literature on this and other types of BELL LOCOMOTIVES.

BELL LOCOMOTIVE WORKS, Inc.
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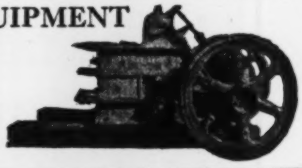
RELIANCE EQUIPMENT
Complete Crushing Plants
Road Oilers
Road Scarifiers
Street Sweepers
Universal Road Machy. Co.
KINGSTON, N. Y.
Branch Office: Boston



BACON — FARREL
ORE & ROCK
CRUSHING — WORLD KNOWN
ROLLS-CRUSHERS
EARLE C. BACON, ENGINEER
HAVEMEYER BUILDING, NEW YORK

IT'S A GREAT DAY IN THE ENGINEERING OFFICE

When the "Old Man" tumbles on to the Ridgway elevator.

He wonders how he could have been so opaque all the while.

Then he usually makes up for lost time. And that is why we keep right on shouting and sassing and smiling. We know the "Old Man" will catch on in due course.

But do you know—it would pay all engineers to keep up to date in their profession instead of allowing only one in a hundred to do so.

When an engineer gets a few clients and a good job or two it often happens he assumes a "front" and a "heavy dig." and says, "You know I am a little conservative."

Good night! He goes right on making blunders big and little and the first thing he knows a good client's next job goes to some fellow who knows what it really means to "Hook 'er to the Biler."

There are so-called "conservative" (back number) engineers who can't even dig up a Ridgway catalog in their offices notwithstanding over 2000 of the biggest and best concerns all over the land are driving us as hard as we can go for these wonderful elevators.

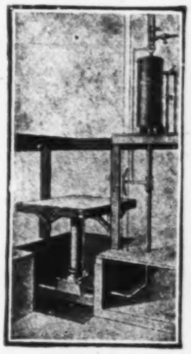
Here are the sort of persons who shout the merits of Ridgway elevators:

United Gas Improvement Co.
Yale & Towne Mfg. Co.
Cluett, Peabody & Co.
Consolidated Gas Co.
National Cash Register Co.
Hammermill Paper Co.
Procter & Gamble Co.
H. J. Heinz Co. "57"
International Harvester Co.
John Wanamaker
Remington Typewriter Co.
Continental Gin Co.
Erie Railroad Co.
Crane & Co. (Dalton)
United States Government
E. I. Du Pont & Co.
General Electric Co.
Packard Motor Car Co.
Continental Can Co.
American Tobacco Co.
John Morrell & Co.

And yet in spite of this there are architects and engineers who have not yet found out what it means to

"Hook 'er to the Biler"

CRAIGE RIDGWAY & SON CO., Coatesville, Pa.
ELEVATOR MAKERS TO FOLKS WHO KNOW



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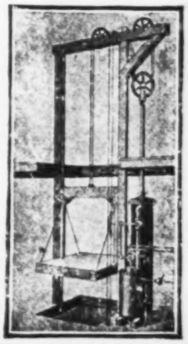

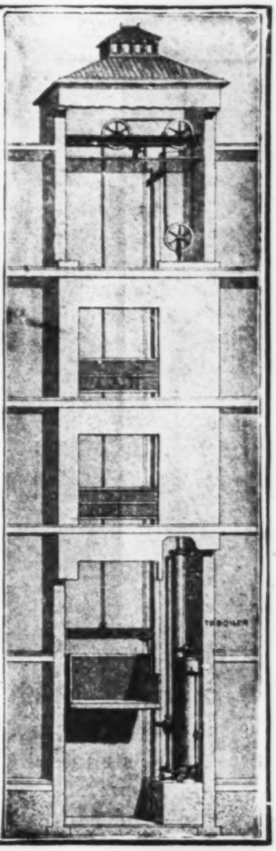

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Single and Duplex
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M'G
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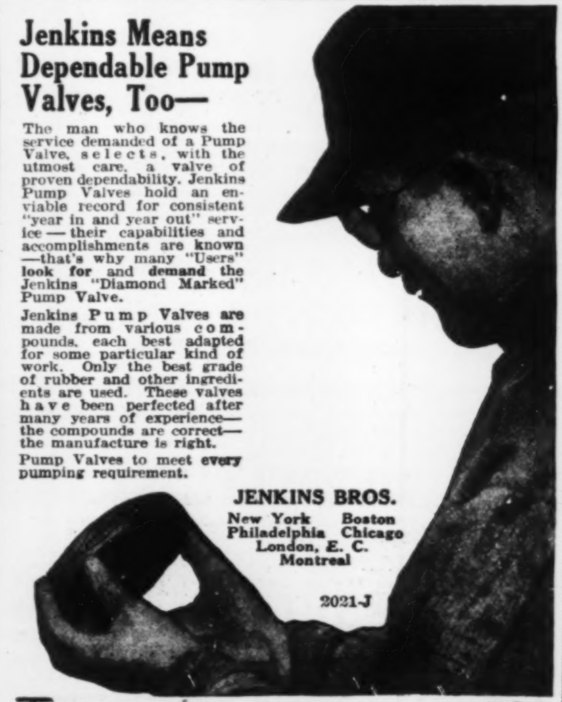
Jenkins Means Dependable Pump Valves, Too—

The man who knows the service demanded of a Pump Valve, selects, with the utmost care, a valve of proven dependability. Jenkins Pump Valves hold an enviable record for consistent "year in and year out" service — their capabilities and accomplishments are known —that's why many "Users" **look for** and **demand** the Jenkins "Diamond Marked" Pump Valve.

Jenkins Pump Valves are made from various compounds, each best adapted for some particular kind of work. Only the best grade of rubber and other ingredients are used. These valves have been perfected after many years of experience—the compounds are correct—the manufacture is right.

Pump Valves to meet **every** pumping requirement.



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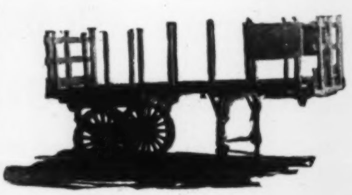

Cut Operating Costs with a

TRACTOR TRUCK

With the use of two or more TRAILERS or semi-trailers the earning power grows by leaps and bounds. You save in labor, in gasoline, in wear and tear and in fact all along the line. *Jack-Knife Turns* is another time-saving feature as well as a mighty handy one.

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THE EAGLE WAGON WORKS AUBURN, NEW YORK

High and Low Speed Trailers, Semi Trailers for Truck and Tractors.

Contractors Dump Wagons and Spreaders, City Garbage Wagons, 3, 4 and 5 yard capacity.

Specialty of One Ton Ford Stake Bodies.

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The Glen Wagon & Car Corporation
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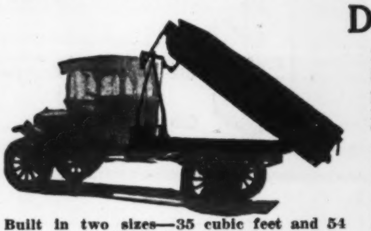

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It is light, durable, and easily operated. Worm-driven hand-hoist gives maximum power for minimum effort, and holds body at any angle. Body, hoist, and subframe shipped complete in one unit. The reversible tail gate has a scuttle door. Fits all light truck chasses and trailers.

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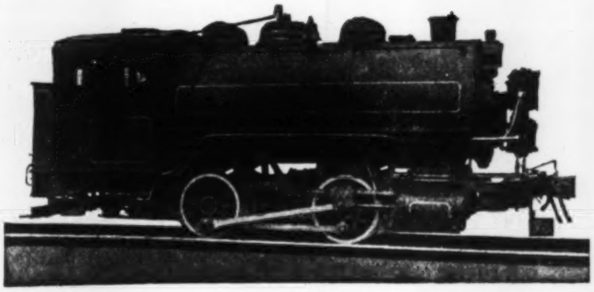

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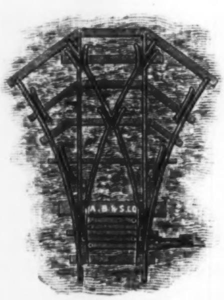

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Put your construction trackwork problems up to ATLAS Engineers. They are experts in this line of work and will solve your "special" problems with standard ATLAS Frogs, Switches, Turnouts, etc.

ATLAS Equipment includes a complete line of Steel Dump Cars for Road Builders, General Contractors and Industrial Plants.

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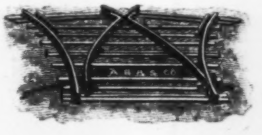

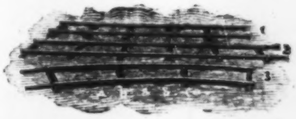

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Our engineering department is waiting to give you the benefit of our experience. Tell us what you move and we'll show you how to move it economically.

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Two Men or Six LIGHTNING

Loader and Unloader

Loads a 3-ton truck in 2 minutes.

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Contains approximately 99.5% of pure bitumen, which does not precipitate under any conditions. Our refining process insures an absolutely uniform product of the proper consistency.

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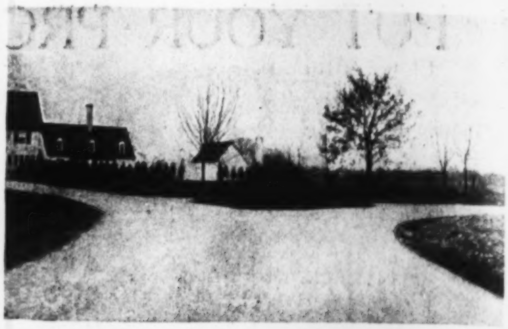
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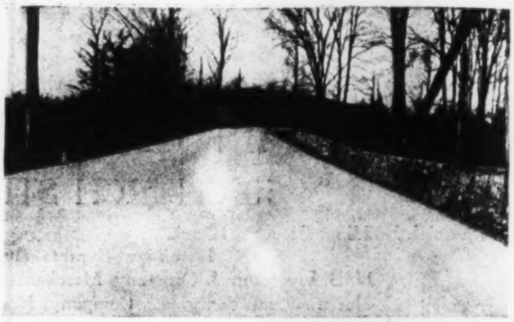
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AN improved asphaltic concrete pavement composed of finely ground slag and especially prepared asphalt.

Bitoslag has demonstrated in practice that it is designed to meet all the demands of modern traffic.

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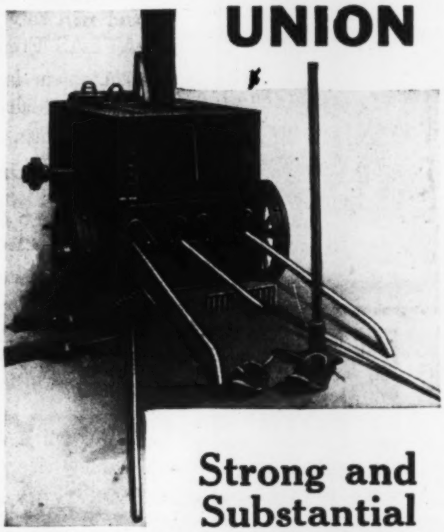
UNION



Strong and Substantial

The heater that every road builder and contractor should have for repair and patching work.

Write for Bulletin 25.

UNION IRON WORKS, Inc.
Hoboken, N. J.

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STANDARD ROAD MAKING PRODUCTS ARE OF THE HIGHEST PURITY

STANDARD Asphalts—Standard Paving and Mixing Asphalts, Standard Binders "B" and "C" for penetration work, and Standard Resurfacing Asphalts—are proven by expert analyses

1. To contain 5% to 33% more bitumen (asphaltum) than the so-called natural asphalts, and to have practically no impurities.
2. Furthermore, they are able to resist climatic changes to a greater extent than other asphalts on the market.
3. They are not affected by water.
4. They have a maximum tensile and cementing strength at both high and low temperatures.

Standard Asphalts are not cut back (fluxed products). They are refined with extreme care, with the idea of producing the best asphalts obtainable.

The greater percentage of bitumen in Standard Asphalts explains why, under average conditions, they cover more yardage per ton than other makes.

Let us supply full information regarding the road-making material which interests you.

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**PAVING AND
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The Same High Quality of Shop Work

which has given "PENNSYLVANIA" tank cars their wide reputation, is now available for steel construction work of all kinds.

The Pennsylvania Tank Car Company

is ready to extend bids for your particular work — no job is too small or too large to receive the careful attention and accurate shop work which has built up our well-known tank car business.

Send us your drawings and specifications.

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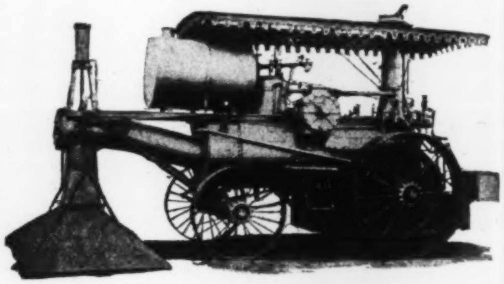

Modern Repair System Adopted by Leading Cities

The foremost cities of the United States are getting better street repairs for half the cost of old style methods by using the

LUTZ SURFACE HEATER

A modern method of repairing and making over bituminous streets and resurfacing old brick, granite, cobble and concrete pavements. Lutz Surface Heaters heat without scorching and burning. No flame comes in contact with the asphalt.

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Equitable Asphalt Maintenance Co.
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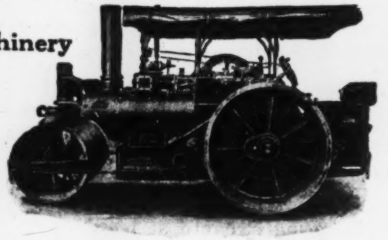
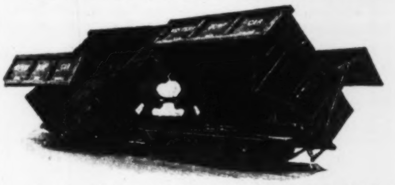
Quality Machinery

Buffalo Pitts Rollers



Are purchased by discriminating buyers because of the many years of satisfactory service which they will render, the low repair costs and their general reliability. *All sizes—all types—write for catalogue.*

Built Only by
THE BUFFALO-SPRINGFIELD ROLLER COMPANY
SPRINGFIELD, OHIO



Will Dump Anything Dumpable

Scores of Industries—Mines, Quarries, Brick Plants, Mills of various kinds—are installing narrow and standard gauge

Western Dump Cars

for handling material within the plant yards.
They lessen the operating cost and increase the output.
Note the steep dumping angle and large discharge opening
Ask the steam shovel contractor. He knows.
Made in all practical sizes from ½ to 30 cu. yds.

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Western Wheeled Scraper Company
Earth and Stone Moving Machinery
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Haul ⅓ More
Load your wagon with
Rapid Loaders
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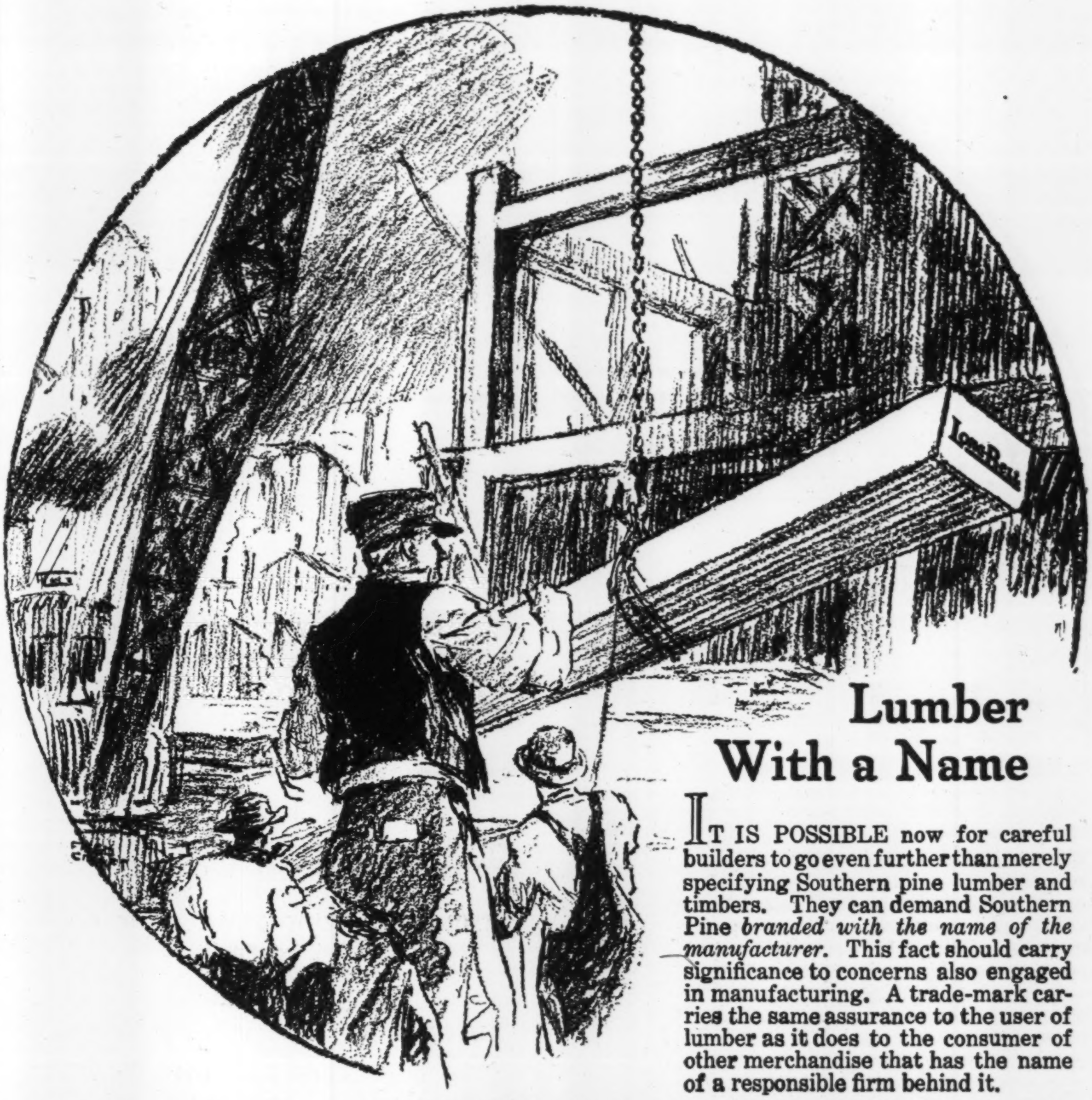

Lumber With a Name

IT IS POSSIBLE now for careful builders to go even further than merely specifying Southern pine lumber and timbers. They can demand Southern Pine *branded with the name of the manufacturer.* This fact should carry significance to concerns also engaged in manufacturing. A trade-mark carries the same assurance to the user of lumber as it does to the consumer of other merchandise that has the name of a responsible firm behind it.

The Long-Bell Lumber Company—largest manufacturer of Southern Pine in United States—brands its entire output with this trade-mark

LONG-BELL

THE MARK ON QUALITY LUMBER

This Company specializes on lumber and timbers for heavy construction. Its products include also Creosoted lumber and timbers, piling and wood blocks. Our creosoting process means that the wood has been treated in air-tight cylinders and the preservative forced under pressure into the entire sap-wood. Factory floors made of **Long-Bell** creosoted wood blocks are unsurpassed—*durable, noiseless, smooth and sanitary.*

ASK YOUR DEALER FOR Long-Bell BRAND.

The Long-Bell Products

Southern Pine Lumber.
Oak, Oak Flooring, Gum.
Creosoted Lumber, Posts, Poles, Piling, Ties and Wood Blocks.
California White Pine.

The Long-Bell Lumber Company

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SALES CORPORATION

Complete Sales, Grading and Inspection Service on

NORTH CAROLINA PINE
See our full page advertisement in second issue.

Address Sales Headquarters

Southern Pine Sales Corp.

Charles Hill—General Sales Manager
Sales Office: 1236 Woolworth Building, New York City

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Wood Preserving Co. 35 Greene St. New York, N. Y.

Sole Producers of Protexol (formerly Avenarius Carbolineum) and other preservatives standardized for brush, spray or open tank treatments. Specifications drawn and cost estimates prepared on receipt of timber schedules. Quick shipments.

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For brush, spray and open tank treatment

S. P. F. Wood Preserving Co., Inc.
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PAVING BLOCKS
NEVER BUCKLE OR DECAY

We have been in the creosoting business 30 years and not a single piece of wood treated by us has ever decayed. **We manufacture Creosoted:**—Conduit, for underground wires, Poles, Ties, Cross Arms, Anchor Blocks, Posts, Piles, Plank, Lumber, Wharf and Bridge Timbers, etc. Also Wood Pipe and Steam Pipe Casings. Send for Catalogue C.

Wyckoff Pipe & Creosoting Co., Inc.
Established 1881
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WE CREOSOTE railroad ties, piles, poles and wood paving blocks in any quantity at our NEWARK, N. J., plant. We can make deliveries at the buyer's convenience, as we keep a large stock of untreated material on hand. Our prices will satisfy you. American Creosoting Company, 17 Battery Place, New York.

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FORM LUMBER SPECIALISTS

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Everything in Long or Short Leaf Yellow Pine

ROCKPORT

For docks, bridges, piers, foundations and paving blocks, granite is the ideal material. Quarried in monoliths of any size. Tidewater shipping facilities.

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CREOSOTED { WOOD BLOCK FLOORS
WOOD BLOCK PAVING
CROSSTIES
TIMBER

THE OHIO WOOD PRESERVING CO.
Century Building, Pittsburgh, Pa.

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Creosoted cross arms, Lumber, Paving Blocks, Piles, Poles and Ties. Private free wharf for ocean vessels at New Orleans. Capacity 100 million feet board measure annually.

Plants at New Orleans, La., and Louisville, Miss.

The Worlds' Largest

METROPOLITAN CANTON O. BLOCK
BESSEMER YOUNGSTOWN BLOCK
THE BEST PAVING BLOCK MADE

Paving Brick Manufacturers

The Metropolitan Paving Brick Co., Canton, Ohio

Has Made Good

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WOOD PRESERVATIVE

For 52 Years

Complies completely with Standard Specifications for Carbolineum and Similar Wood Preserving Oils.

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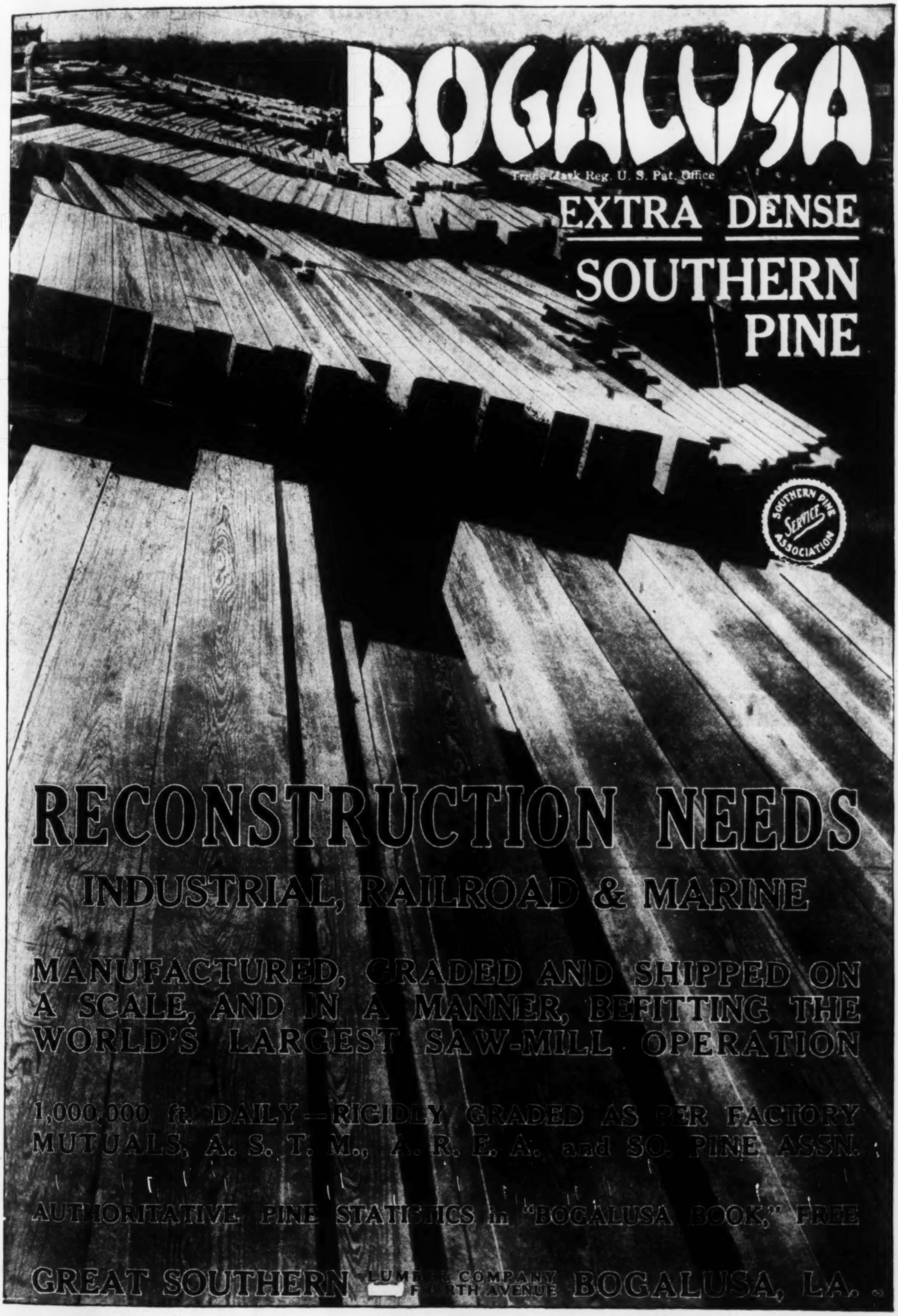

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SOUTHERN PINE SERVICE ASSOCIATION

RECONSTRUCTION NEEDS

INDUSTRIAL, RAILROAD & MARINE

MANUFACTURED, GRADED AND SHIPPED ON A SCALE, AND IN A MANNER, BEFITTING THE WORLD'S LARGEST SAW-MILL OPERATION

1,000,000 ft. DAILY—RIGIDLY GRADED AS PER FACTORY MUTUALS, A. S. T. M., A. R. E. A. and SO. PINE ASSN.

AUTHORITATIVE PINE STATISTICS in "BOGALUSA BOOK," FREE

GREAT SOUTHERN LUMBER COMPANY FOURTH AVENUE BOGALUSA, LA.

Industrial Lumber Co's
CALCASIEU
LONG LEAF TIMBERS

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Mill Constructed Factories and Warehouses, Railroad Structures, Ships, Etc.

Graded to meet specifications of Factory Mutuals, American Railway Engineering Association and Southern Pine Association.

Every Stick Branded — for Your Protection.

The Calcasieu District of Louisiana is famous for its long-leaf pine—sound, strong, extra-dense and durable.

And the Industrial Mills are located at Elizabeth — right in the heart of the Calcasieu District.

Enormous mill production, rigid inspection and grading, and ample shipping facilities, guarantee "what you want—when you want it." That's our standard of service.

Come to Elizabeth for your next timber shipment.

This Brand On Every Stick

STRENGTH
CALCASIEU LONG LEAF PINE
TRADE MARK
ROT RESISTANCE

INDUSTRIAL LUMBER CO.
Elizabeth, La.
Member Southern Pine Association

Pipe Made Where Laid, Using Home Labor and Materials.

Reinforced Concrete "Lock Joint" Pipe

In the installation of water pressure, conduits, storm and sanitary sewers and subaqueous lines, there are many advantages in the use of LOCK JOINT REINFORCED CONCRETE PIPE.

In the first place it means a highly satisfactory job, and furthermore, home labor may be utilized, and materials bought from local dealers.

Write for our new catalog and estimates. Address Ampere, New Jersey.

Standard stock sizes of sewer pipe—24 to 48 inches on hand for immediate shipment from our plant at Ampere, New Jersey.

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Canada Lock Joint Pipe Ltd.
Winnipeg, Canada

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Pulverizing Machinery

used in producing a fine ground

Bauxite

for manufacturing

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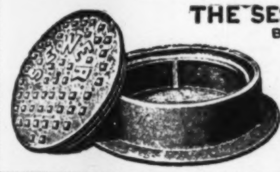
used in filtration plants.

We specialize in the manufacture of pulverizing machinery for the fine grinding of all materials to a powder.

Raymond Bros. Impact Pulverizer Co.
1302 N. Branch St., Chicago



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SEWER and SUBWAY MANHOLE CASTINGS

Sewer Catch-Basin Castings, Etc.

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AUTOMATIC

MILLER SIPHONS

Save Labor

for

Flushing Sewers and Disposal Plants.

Free Illustrated Catalogs

PACIFIC FLUSH-TANK CO.
Chicago, Ill., and New York.

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Are Reduced in Iron to Increase Its Rust-Resisting Powers

COPPER

Is Added to Steel for the Same Purpose

"Genuine Open Hearth Iron"

sheets are 99.875% Pure and also contains not less than .25% *Copper.* In addition the square foot of exposed surface carries *not less* than 2 *ozs. of Spelter.*

Our Corrugated Culverts are made of this exceptional material, which combining so many good qualities, just naturally can't keep from giving *Service.*

The Newport Culvert Co., Inc.
641 West Tenth St., Newport, Ky.
Majestic Building, Chicago, Ill.

In Difficult Situations

2-ft. half-sections of 10-gauge 72 in. "ACME" Culvert are easily loaded, unloaded and installed by two men.

"ACME" (NESTABLE) Corrugated CULVERTS

Anti-Corrosive NO-CO-RO METAL Galvanized

Can be assembled right in the ditch in places where full circle culvert would be out of the question. Write now for catalog 24 and delivered prices.

THE CANTON CULVERT & SILO CO.
MANUFACTURERS
CANTON, OHIO, U.S.A.

No Breaks, No Sagging, No Roots, No Skilled Labor—

Here's the new-idea joint—the joint free from every defect known to pipe laying the joint made possible by

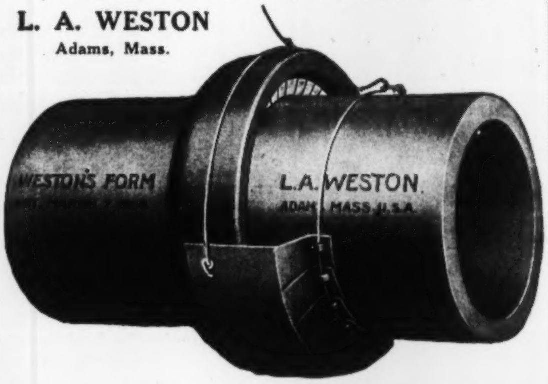
WESTON'S

Gasket and Form for Tile Pipe

Many cities and towns have used it on all sewer work during the past two years. Prof. Lawson, of Rensselaer Polytechnic Institute, has called it the logical gasket and form "to facilitate the laying of sewers, make waterproof joints and maintain the proper alignment of the insert at the pipe joints."

Write for the circular which gives its full story today.

L. A. WESTON
Adams, Mass.



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Northwestern Steel Forms are accepted as standard in every state. Used and recommended by engineers and contractors in every part of the country for construction of culverts, sewers, flumes, drains, tile and similar work. They are durable, economical, satisfactory.

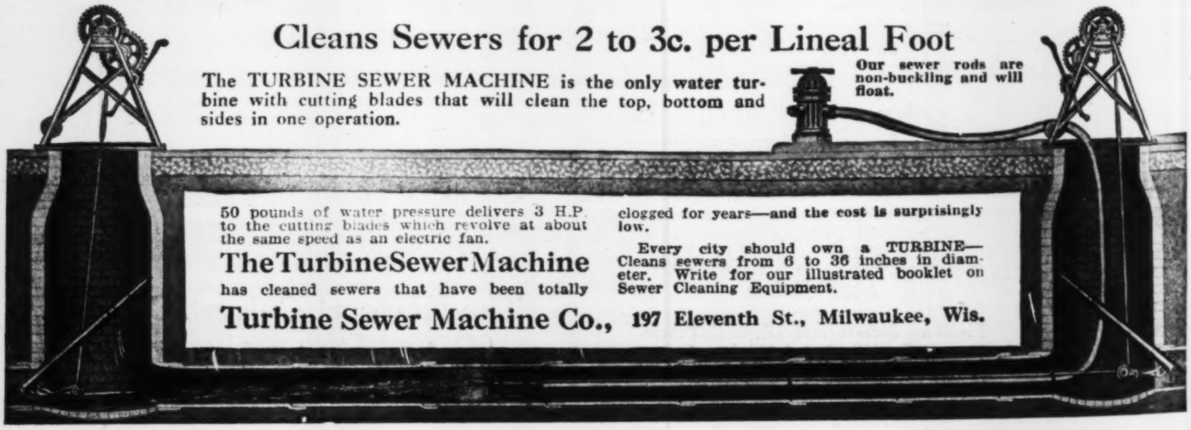
Tile and culverts can be made on the job. For complete information write for Bulletin No. 20.

Northwestern Steel & Iron Works
Eau Claire, Wisconsin

Cleans Sewers for 2 to 3c. per Lineal Foot

The TURBINE SEWER MACHINE is the only water turbine with cutting blades that will clean the top, bottom and sides in one operation.

Our sewer rods are non-buckling and will float.



50 pounds of water pressure delivers 3 H.P. to the cutting blades which revolve at about the same speed as an electric fan.

The Turbine Sewer Machine has cleaned sewers that have been totally clogged for years—and the cost is surprisingly low.

Every city should own a TURBINE—Cleans sewers from 6 to 36 inches in diameter. Write for our illustrated booklet on Sewer Cleaning Equipment.

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COPPER STEEL
Galvanized

Sheets

Highest in quality and rust resistance. Unequaled for Culverts, Flumes, Tanks, Roofing, Siding, Spouting, and all exposed sheet metal work.

We manufacture Sheet and Tin Mill Products of every description—Black and Galvanized Sheets, Corrugated and Formed Products, Roofing Tin Plates, Etc.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

Concrete Reinforcing

Steelcrete

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The big flat sheets are stiff and rigid. Easily handled, quickly placed.

THE CONSOLIDATED EXPANDED METAL COMPANIES
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NEW YORK, Expanded Metal Engineering Co.
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THE FIREPROOF VENTILATING FLOORING
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ROUNDS SQUARES TWISTED DEFORMED
WITHEROW STEEL CO.
PITTSBURGH
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UNIVERSAL FORM CLAMPS

For all kinds of concrete forms. Speedy, simple, economical, secure. Low in first cost. Indestructible. Six sizes. Write for free sample and prices.

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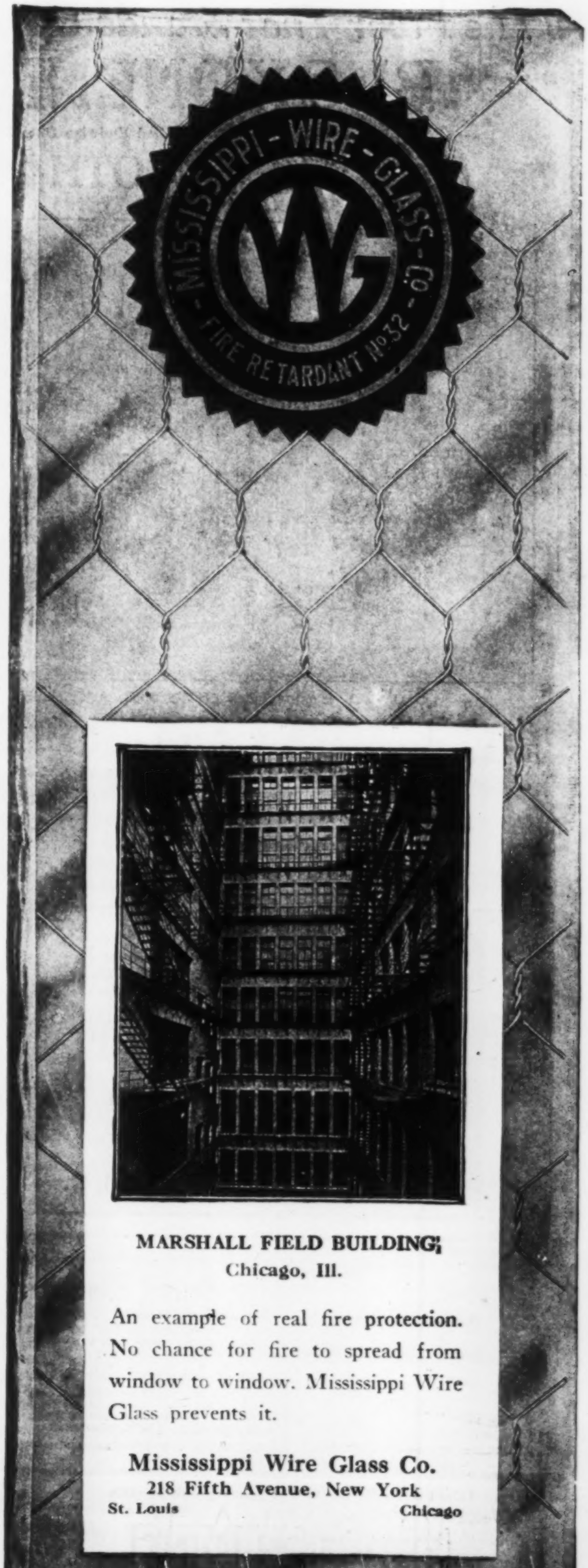

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An example of real fire protection. No chance for fire to spread from window to window. Mississippi Wire Glass prevents it.

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BLOXONEND FLOORING

Wood Blocks Dovetailed Endwise Onto Wood Base Strip Matched Like Flooring.

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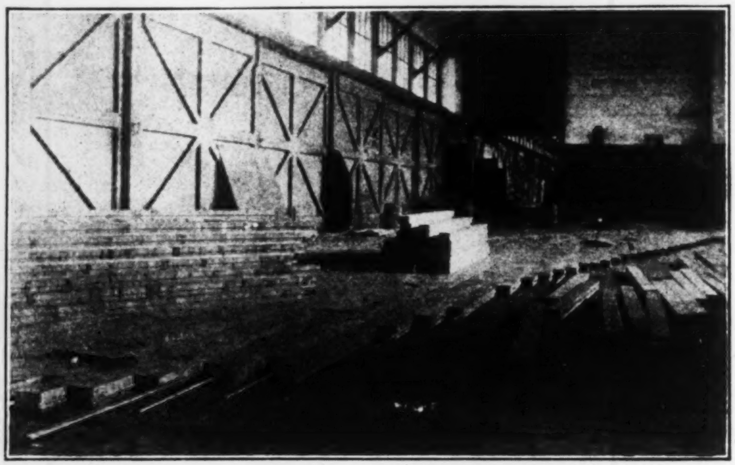

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BLOXONEND combines the durability and resiliency of a street pavement with the smoothness of a matched floor. Adaptable to Wood, Steel or Concrete construction.

End of grain exposed to wear. Sections average 7½ ft. long.

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Elastite EXPANSION JOINT

The original and only Elastite Joint

Comes to the job ready for use. No **joints** to **pour**. No spacing strips to remove.
Used in National and Dixie Highways.
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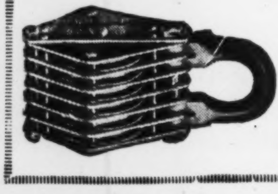

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Are Standard

For any lift or difficult working condition they are safest, strongest and most durable.

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Give up the old method of pouring Joints—use

IDEAL EXPANSION JOINT

The Ideal Method of Providing for Expansion in Improved Pavements

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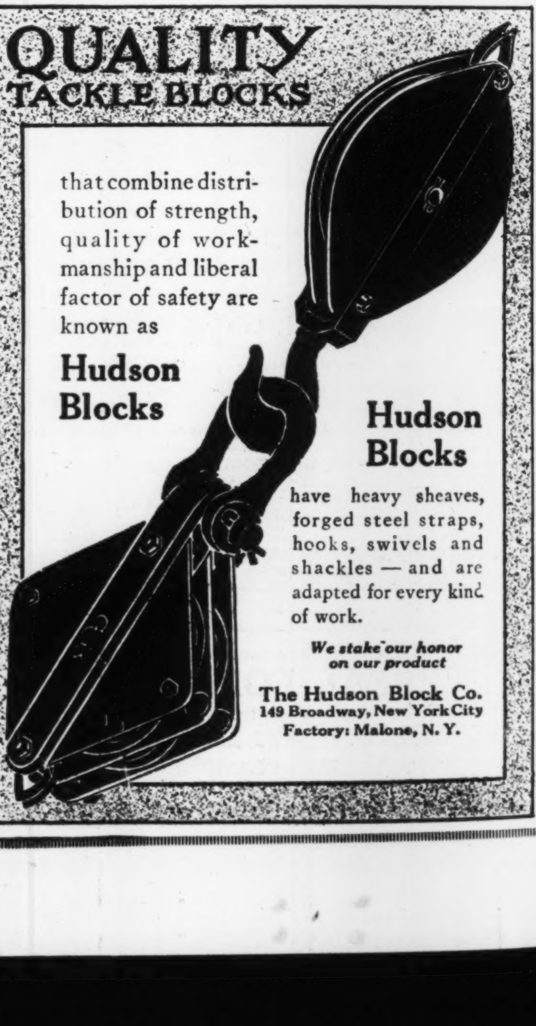

that combine distribution of strength, quality of workmanship and liberal factor of safety are known as

Hudson Blocks

Hudson Blocks

have heavy sheaves, forged steel straps, hooks, swivels and shackles — and are adapted for every kind of work.

We stake our honor on our product

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149 Broadway, New York City
Factory: Malone, N. Y.

Mr. Jiffy Says—

"Mr. Progressive Contractor, you need Jiffy Labor Savers in your concrete construction."

"You cannot afford to use old methods when *JIFFY* Adjustable Jacks will—

SAVE 65% of the cost of deck lumber.

SAVE you 50% in carpenter work—JIFFY Jacks are adjustable without sawing, nailing, splicing or wedging.

SAVE you 75% of the time spent in shoring—common laborers can erect them **quickly.**

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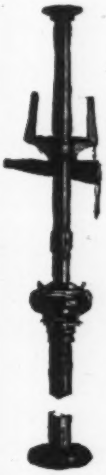
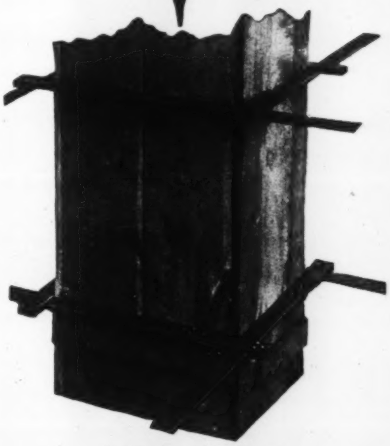
SAVE you 100% on nails—**JIFFY Brace Clamps** solve the problem of holding braces to the jacks.

The dollars which JIFFY Jacks save, enable you to land more contracts, particularly where figures are close, and also to make more profit on those you secure.

Let us give you **details.**



Jiffy Column Clamps



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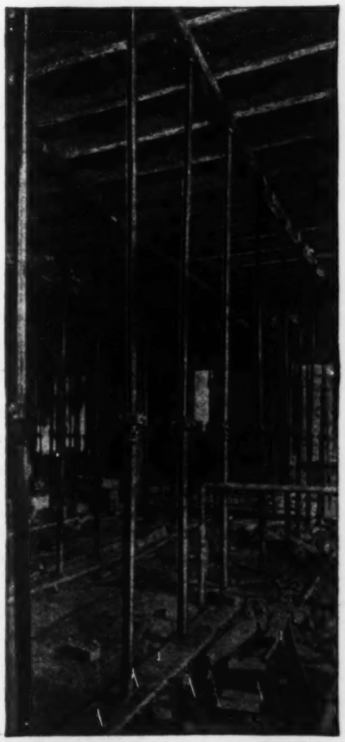

Write today

for details and prices on Jiffy Labor Savers for concrete construction. They will soon pay for themselves.

Jiffy Speed Punch
is a five-pound hand punch that will punch holes in metal and *do it fast.* It is so designed that an operator may work close to the metal and follow punch marks with great speed. Built for heavy work, too. Punches $\frac{1}{8}$-in., $\frac{5}{32}$-in., $\frac{3}{16}$-in., $\frac{7}{32}$-in., $\frac{1}{4}$-in. and $\frac{9}{32}$-in. holes through 10-gauge metal.

Write for Circular S.

Jiffy Adjustable Cutter
is a light weight, portable tool that cuts round holes in metal, fibre, slate, marble, etc.—and *does it fast.* It is quickly adjustable to sizes from $1\frac{1}{4}$-in. to 6-in. diameter. Can be used in the most difficult positions.

Jiffy Cutter cuts cost of cutting holes.

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Ill.

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TELEGRAM
Franklin Steel Works
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"Franklin"

Steel for Concrete Reinforcing

You get it as promptly as you need it. Service is one of the chief things that has made the quality of Franklin Steel popular. Prices are right, too. Ask for quotations.

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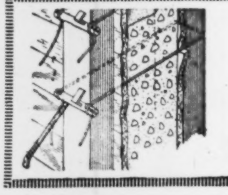

ADJUSTABLE WIRE CLAMPS
for wall, beam or column forms
SAVE LABOR
Quickly placed and instantly released
Made in two sizes
Write for free samples and circular
M & M ADJUSTABLE WIRE CLAMP CO.
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FOR
REINFORCING CONCRETE
Manufactured by
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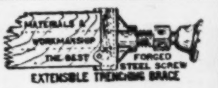
ST. LOUIS, MO.

TRENCH BRACES
Simple, Strong, Extensible, Forged
Steel Screws Guaranteed.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THE BEST
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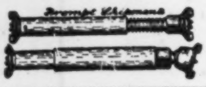
EXTENSIBLE TRENCHING BRACE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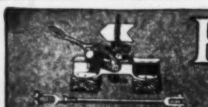

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Extreme Accuracy Sturdiness and Long Life

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SHIP-BUILDERS'
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SECURITY inserts do not require bolts or dowell pins to hold them to the form.

Anyone with a few nails can locate SECURITY Inserts upright and exactly where required. Made in sizes for ⅜ to ⅞ in. bolts.

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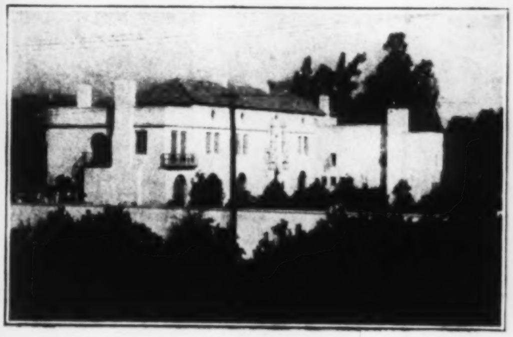

HENRY COPPEL RESIDENCE, Pasadena, Cal.
Bertram Goodhue, *Architect*

Waterproof both below grade and above grade

R.I.W. TOXEMENT

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"R. I. W. Toxement below grade"—as usual—was the terse report regarding the waterproofing of the Henry Coppel residence in Pasadena, California (Bertram Goodhue, Architect, Thos. C. Marlowe, Contractor). And just as terse is the report of results—*absolutely waterproof.* Wherever a situation arises, whether in a fine structure like this or a great undertaking like the Norfolk Navy Yard Drydock, where concrete is particularly exposed to dampness and water ever under pressure, "R. I. W." Toxement is the logical choice. Just mix the powder with the Portland cement.

Nº 232 R.I.W.

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DAMP-RESISTING PAINT

was used on the interior of all exterior walls, and for the backing of all ornamental cut stone—and rightly so! No. 232 is preeminently the paint for such situations; a black, waterproof, elastic, tacky material. It makes furring and lathing unnecessary and bonds perfectly with plaster. No. 232 is the ideal preparation for the protection of all worthwhile structures, above the ground level.

Write for Booklet R.

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Technical and Scientific Paint Makers Since 1848
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Works: New York London, England Toronto, Canada

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STEEL NEED NOT RUST!
WOOD NEED NOT ROT!
NOR CONCRETE DUST!

Concrete Can Be Bonded With

LIVING-STONE

"None of the specimens broke at the point where they were bonded," states Robert W. Hunt & Co., Bureau of Tests, Chicago. The test of time has proved it.

They further state, "From all our tests on this material, we are of the opinion that with its proper use, there can be established a *perfect bond* between old and new concrete."

Not a perfect bond only but *no detriment to the concrete itself.* LIVING-STONE contains no acid, therefore it cannot injure the concrete.

Do you use muriatic or sulphuric acid? Don't! They produce a spongy surface of no strength. If the acid seeps through the porous concrete and reaches the steel your reinforcing system is endangered. *The only safe and certain way is LIVING-STONE.*

Let us send you our catalog giving other interesting details.

The Living-Stone Company
225 Courtlandt St., Baltimore, Md.

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The Baker Design is the Quality Sign

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Tents that turn the rain. Paulins that really protect your machinery and material. Waterproofing that *waterproofs*. Quick delivery on anything you want.

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The U. S. Government unites with manufacturers to secure and retain satisfied employees by enclosing workmen's homes with Cyclone Fence.

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Cement and Hydrated Lime Plants a Specialty
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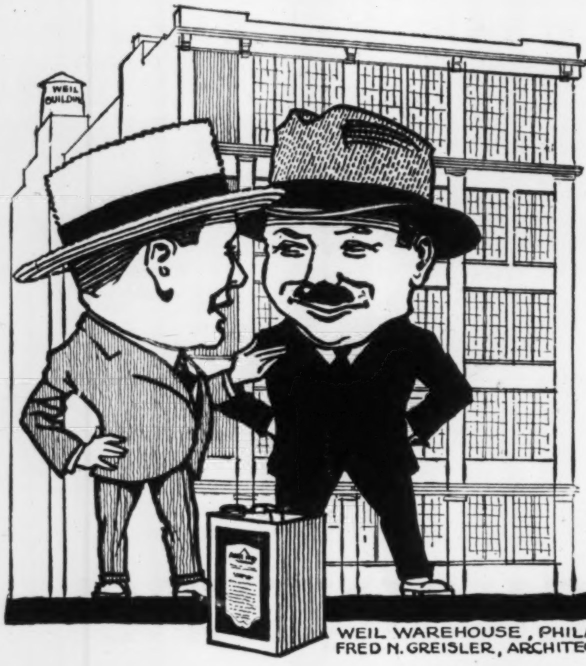

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Lapidolith prevents concrete dust by making old or new concrete floors wearproof.
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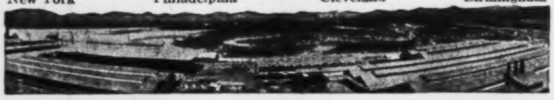

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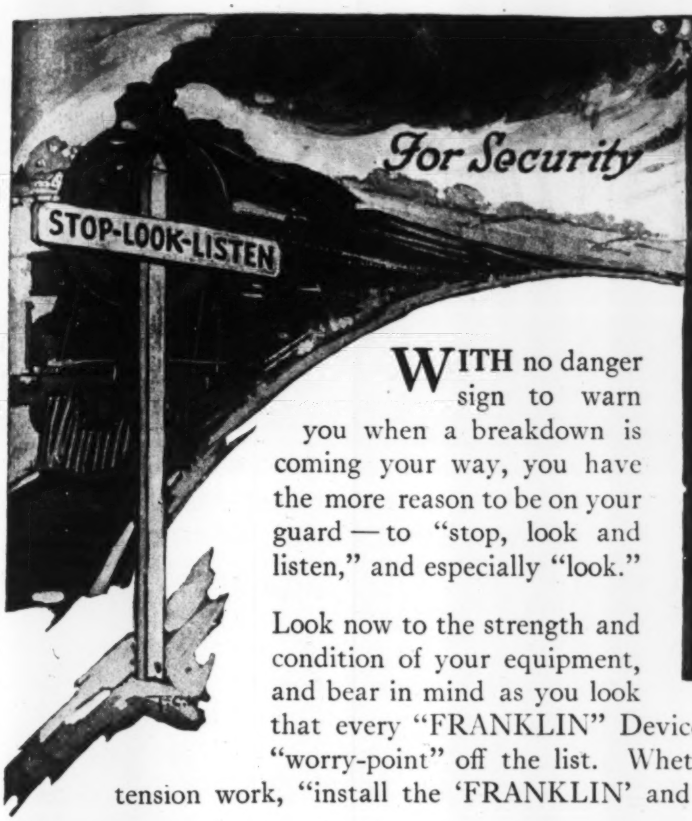

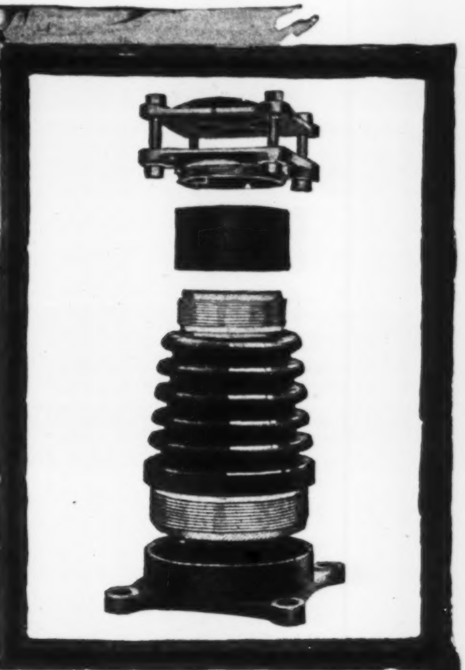

WITH no danger sign to warn you when a breakdown is coming your way, you have the more reason to be on your guard — to "stop, look and listen," and especially "look."

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The Ideal Lime for Brick Mortar and Concrete
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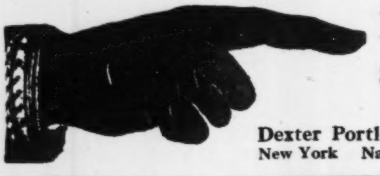

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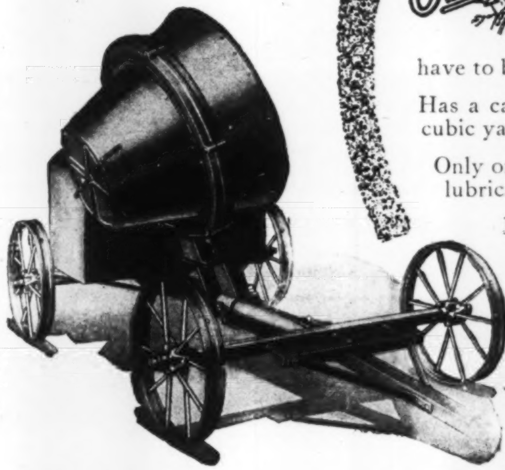
Automatic Discharge -no tilting of Drum.



If you could double your profits on the ordinary small job, it would really be worth taking.

That's just what you can do with an Eveready Mixer. It not only doubles the profit, but it cuts the time in half. The

Eveready Mixer

was specially built to handle small jobs economically—jobs that would otherwise have to be done by hand.

Has a capacity of 4 cu. ft. mixed material and delivers 35 to 50 cubic yards per 8-hour day.

Only one gear, one shaft and two ball bearings. One oil hole lubricates the entire mixer.

Powered by special 2-hp. gasoline engine.

And the price **complete with power** is only $260.

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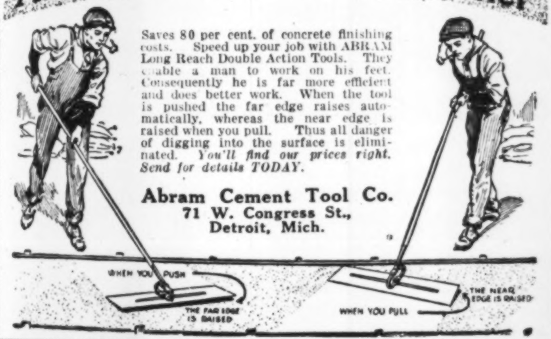
ABRAM Double Action Finisher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THE FAR EDGE IS RAISED
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Saves 80 per cent. of concrete finishing costs. Speed up your job with ABRAM Long Reach Double Action Tools. They enable a man to work on his feet. Consequently he is far more efficient and does better work. When the tool is pushed the far edge raises automatically, whereas the near edge is raised when you pull. Thus all danger of digging into the surface is eliminated. *You'll find our prices right. Send for details TODAY.*

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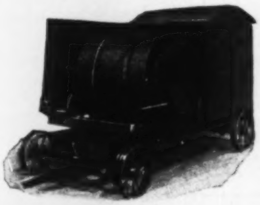

The patented low charging design of "The Standard" Mixers permits the aggregates to be wheeled up short, slightly inclined runways to a low, wide platform, which is portable with the mixer. Improved design enables "The "Standard" Mixer to turn out perfectly mixed concrete at the rate of a batch a minute and keep up this pace indefinitely.

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It takes your concrete from the mixer to the job in a fraction of the time—it replaces the men required to do this work—it is run by the same man who looks after the mixer.

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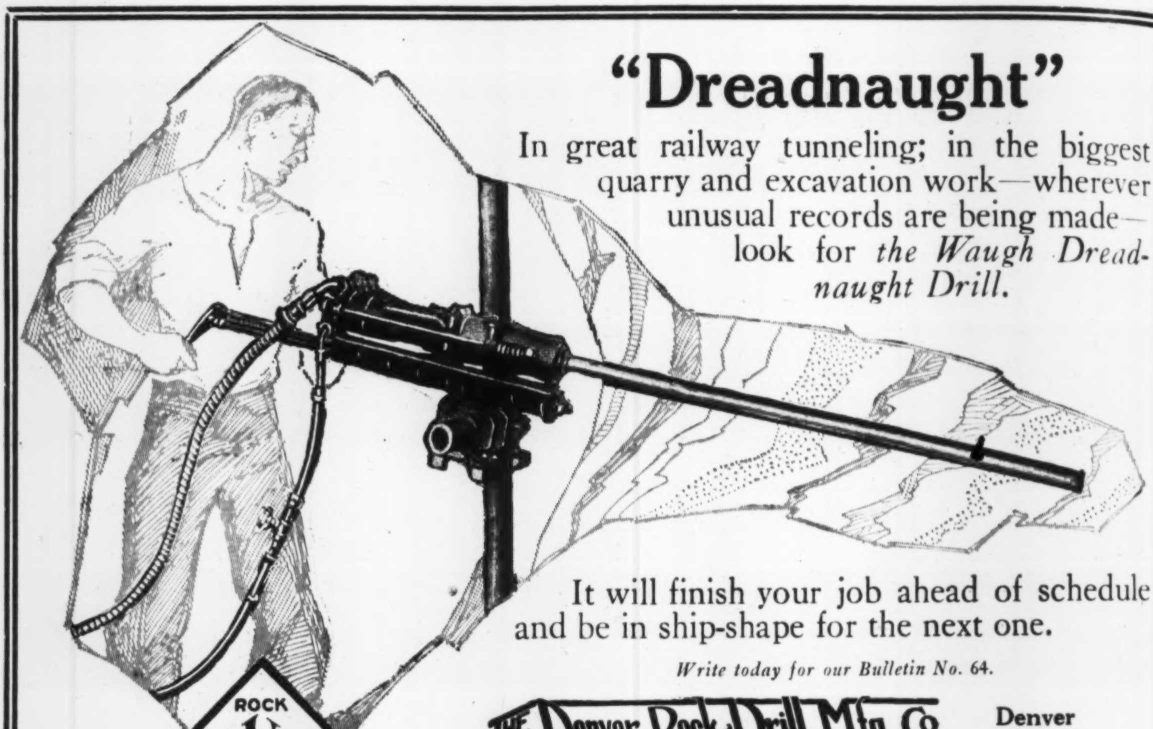

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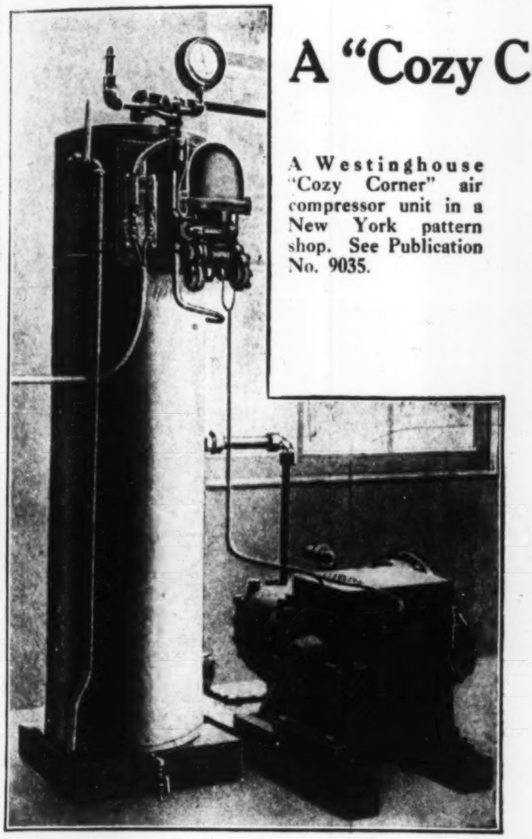

A Westinghouse "Cozy Corner" air compressor unit in a New York pattern shop. See Publication No. 9035.

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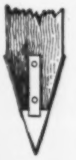

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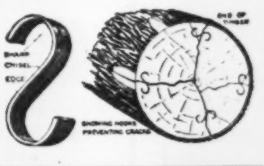

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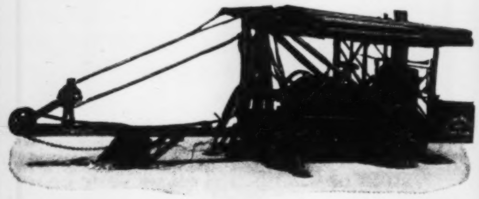

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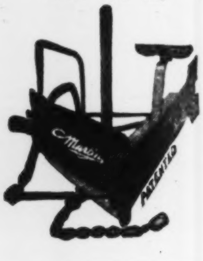

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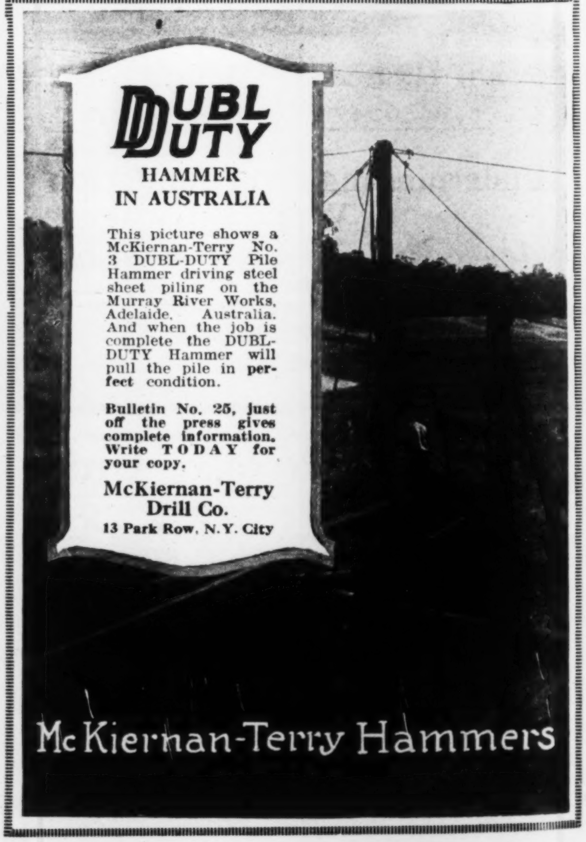

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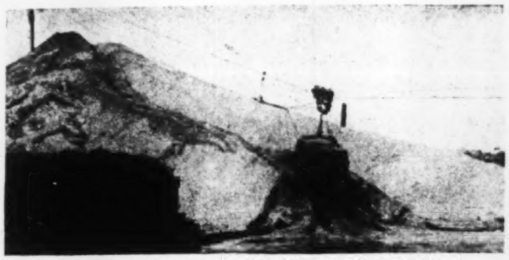

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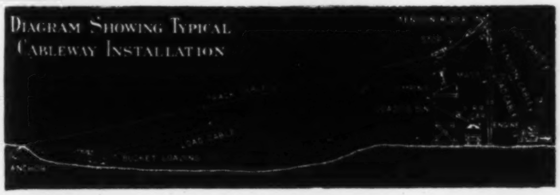

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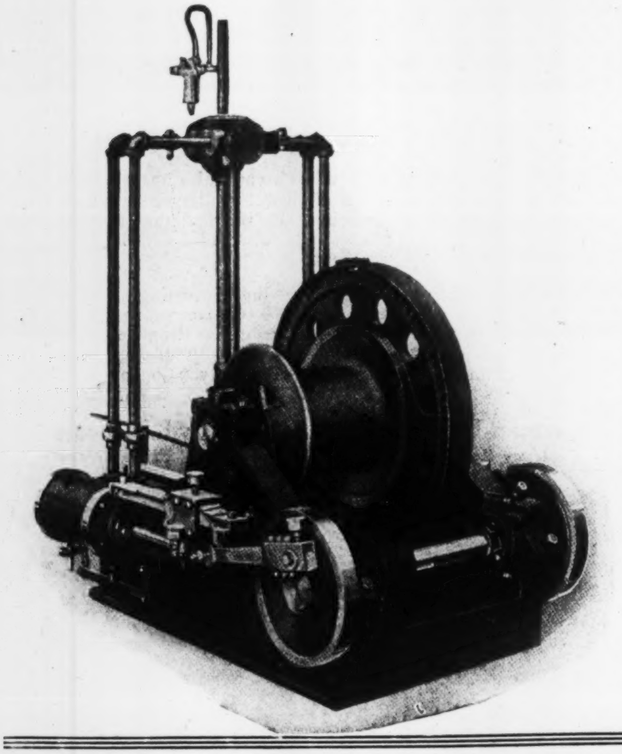

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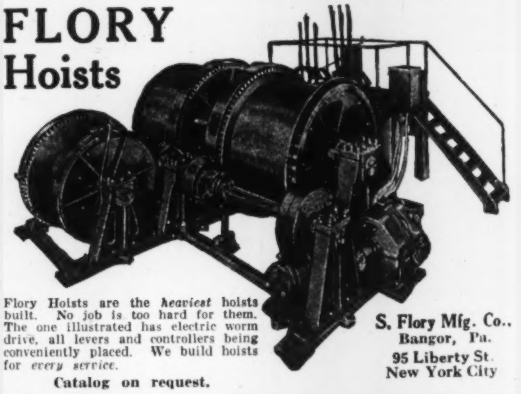

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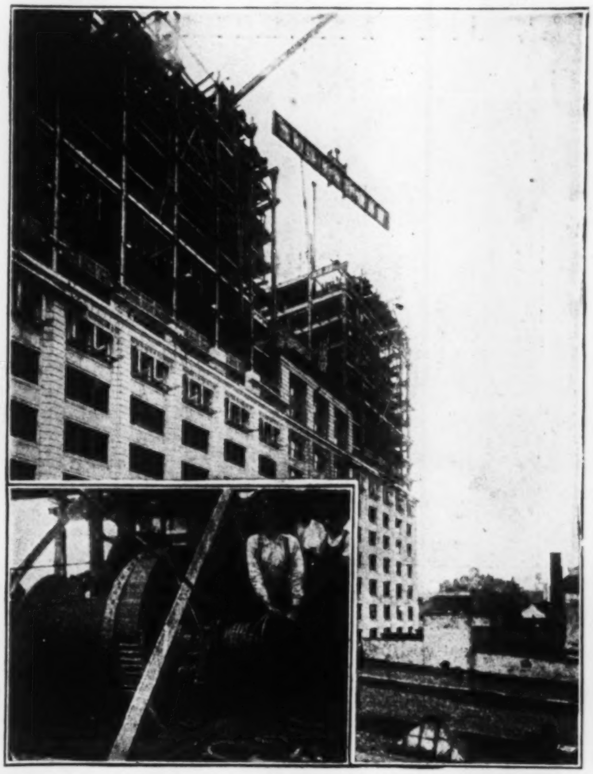

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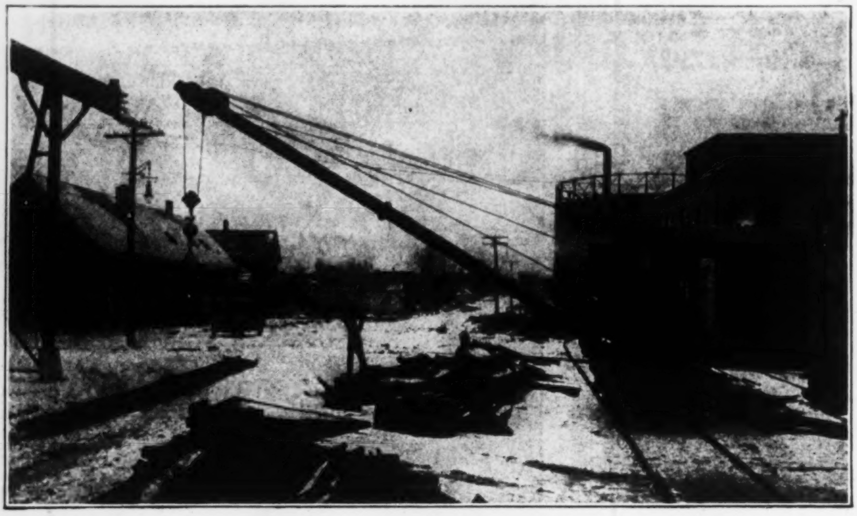

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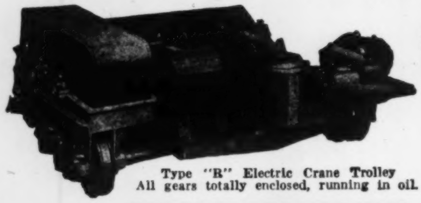

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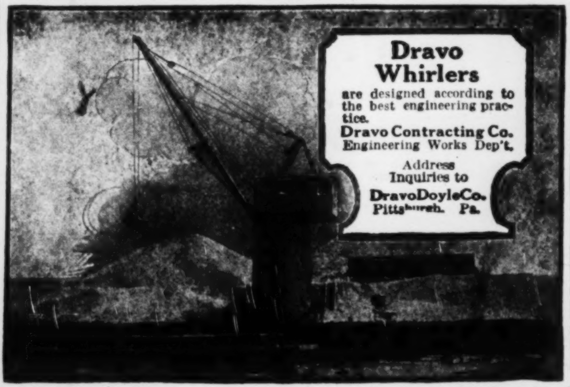

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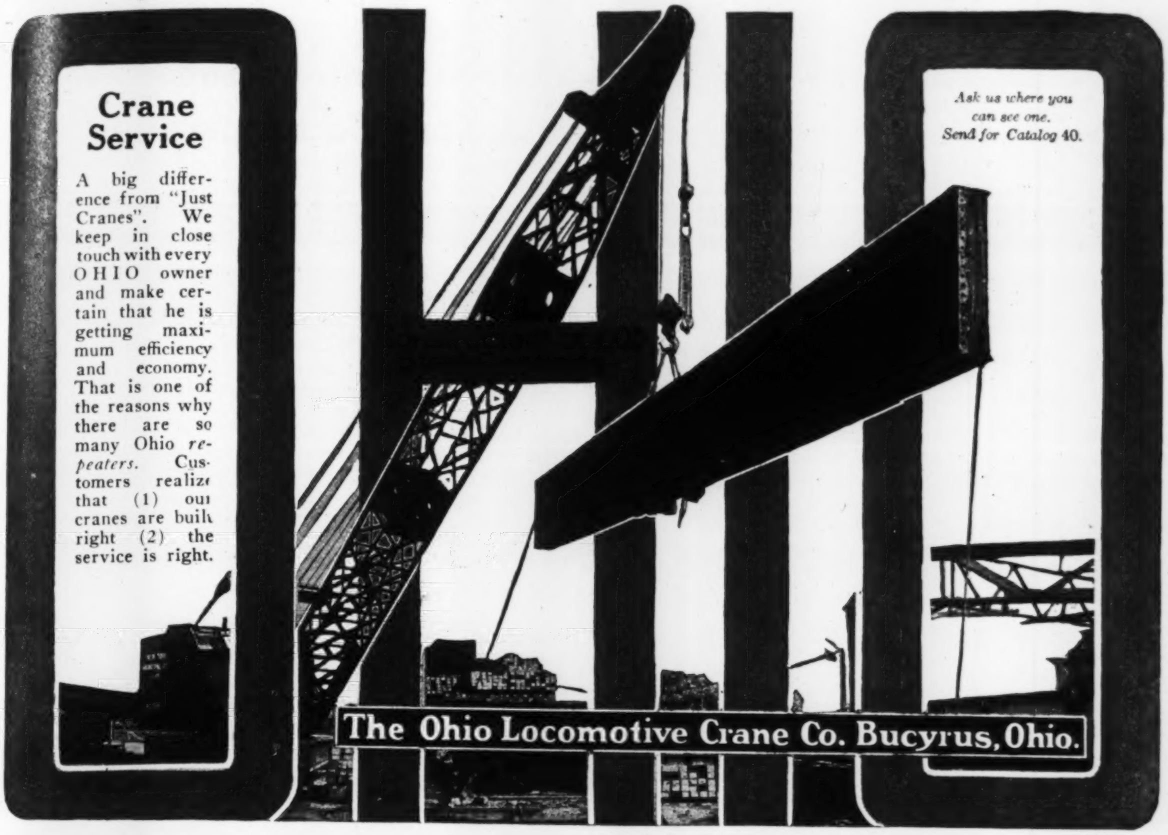

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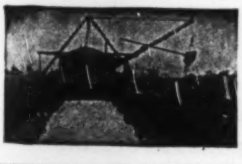

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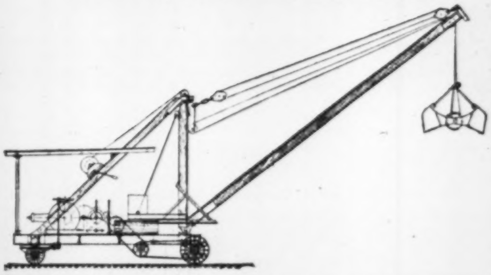

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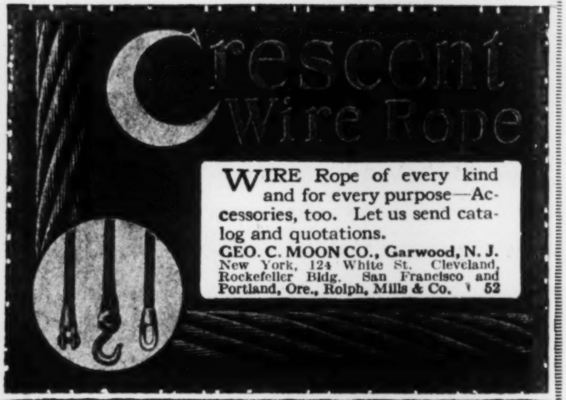
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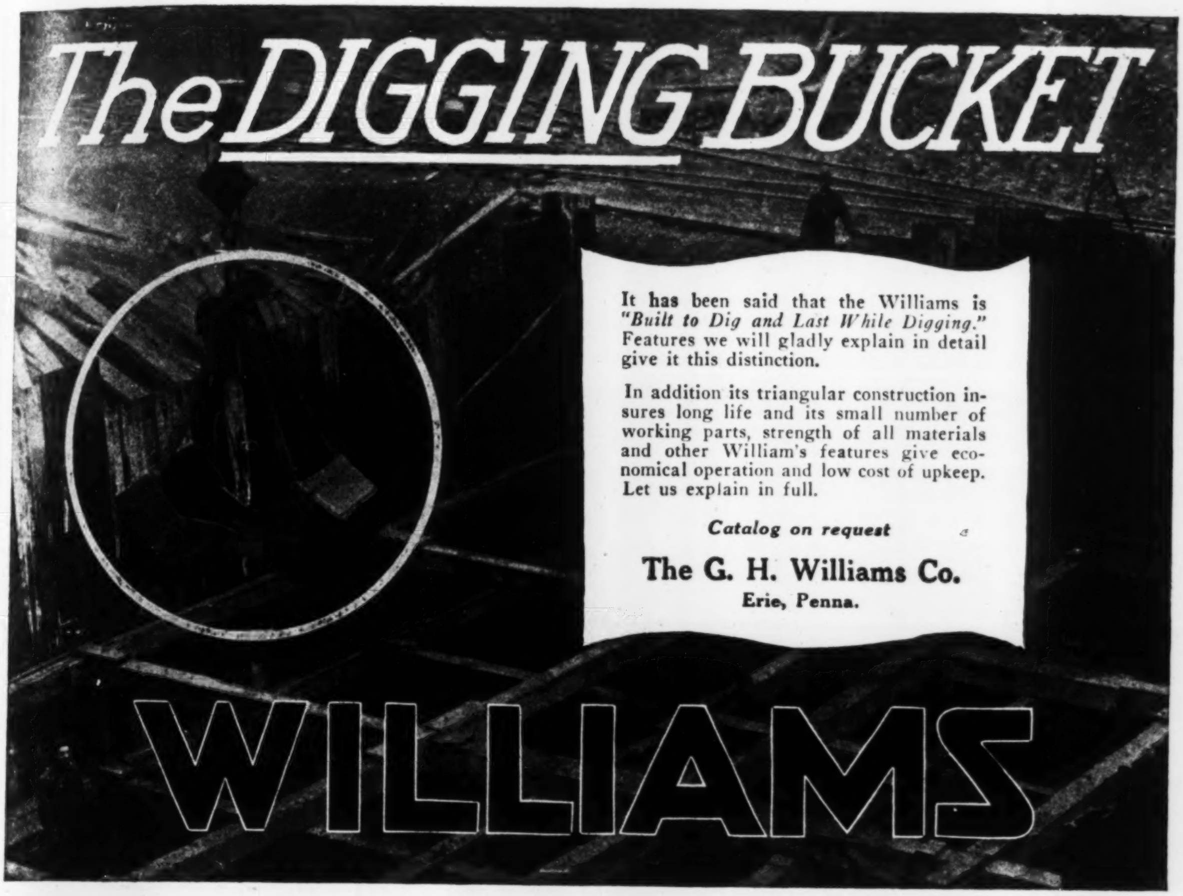

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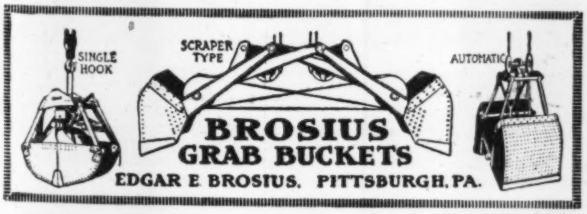

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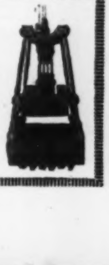

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OWEN *Clam Shell* BUCKETS INSURE A BIGGER DAYS WORK

The Owen Bucket Co.
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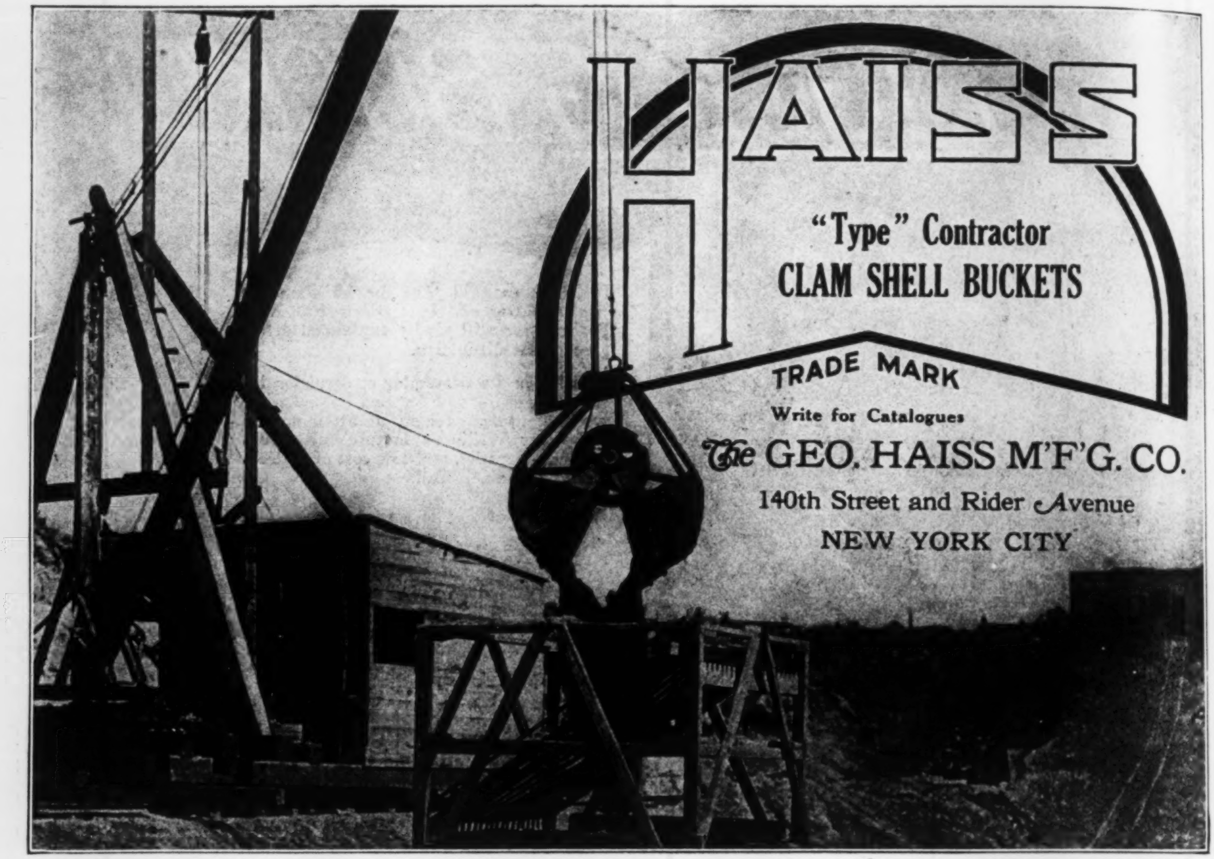
BUCKETS



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"Type" Contractor
CLAM SHELL BUCKETS

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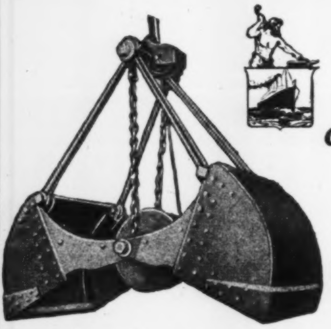
BUCKETS—

For All Classes of Work

Contractors Clam Shells—Orange Peels



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Positively the last word in bucket construction. Substantially built, easy to operate, few wearing parts. Large stock on hand—reasonable in price.

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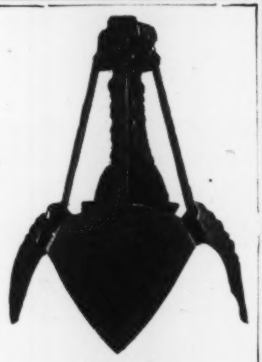

Orange Peel

BUCKET DREDGES

LESCHEN WIRE ROPE

The material and workmanship that is a part of every Leschen Wire Rope, make it safe, dependable and economical.

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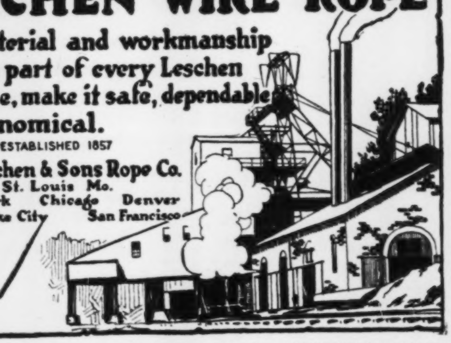

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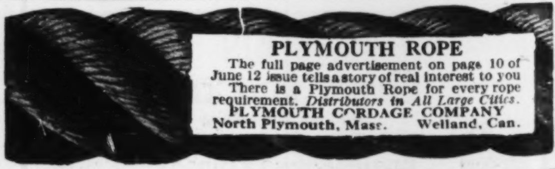
Orange Peel Buckets—the fruition of thirty-five years' experience in building better buckets. Three- or four-sided types with or without cut-off blades. Ask for Catalog 43. 2453-Y

The Hayward Co., 48-50 Church St., New York



PLYMOUTH ROPE

The full page advertisement on page 10 of June 12 issue tells a story of real interest to you There is a Plymouth Rope for every rope requirement. *Distributors in All Large Cities.*

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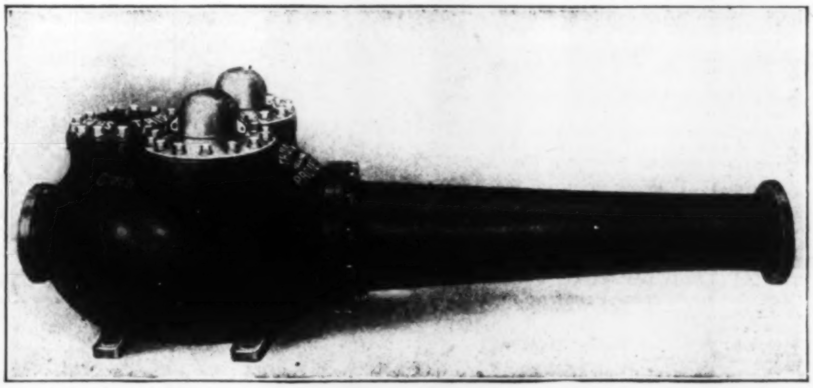
North Plymouth, Mass. Welland, Can.



Bought on Performance

A city in western New York, run by a City Manager, was in the market for 2500 meters. His idea of economy was to accept the lowest bid. There wasn't anything else to do in his opinion.

"But before you do that, hadn't you better look at the records of the meters we have in service and compare them on that basis?" asked the Water-works Superintendent. Mr. City Manager did.

Maintenance and repair charges were so much greater than the difference in first cost that the entire 2500 were bought of the highest bidder.

Wherever Performance is given Preference over Price, Trident Meters are specified.

NEPTUNE METER COMPANY
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For Water Works

The importance of accurately measuring water flow both to and from the pumping station and through the distribution mains is the reason why so many leading municipal and private water companies have equipped their lines with

VENTURI METERS

1. They indicate the momentary flow: register the total flow; and trace a continuous chart record of all changes in the rate of flow.
2. Permanently accurate.
3. Not subject to clogging.
4. Occupy small space.
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8. Can be used to control automatically the chemical feed.
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Norton Self-Lowering Jacks Are the Fastest Jacks Made

They lower the full load with absolute safety by pressing the button—you do not have to pump or crank them down as with other jacks.

25 to 100 tons capacity—Plain and with foot lift. Send for complete illustrated Catalog No. 30.

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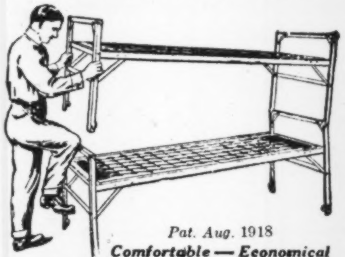

Pat. Aug. 1918

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Let Us Give You Details

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are so constructed that it takes but a jiffy—and no tools—to assemble or dissemble a tier of them. And each cot is in but one piece that folds when idle. Their use makes large quarters of small rooms and provides as well that kind of rest that workmen need. One order has convinced many.

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Eureka Utility

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Pittsburgh Meter Co.
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Easily Carried By One Man

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Hydraulically, Electrically and Hand Operated Gate Valves and Sluice Gates

For Waterworks, Power Plants and Filtration Systems
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Hydraulically and Electrically-Operated Valves and Sluice Gates
Valves Designed for all Kinds of Service.

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Demand *Tycos* on the instrument you install, the service delivered will be complete. The experience of many users sustain us in this claim. Let us send information—a request incurs no obligation.

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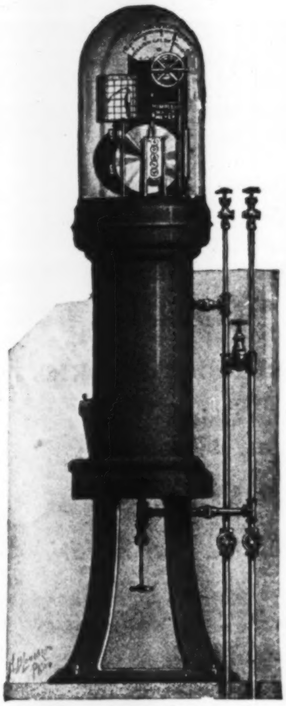

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SIMPLEX Registering Meters

They stand alone.

The ROLLER TRACTION WHEEL is especially important. This simple device *rolls*. It eliminates sliding and thus practically all friction. *It insures accuracy in low flows.*

Let us explain this feature in full.

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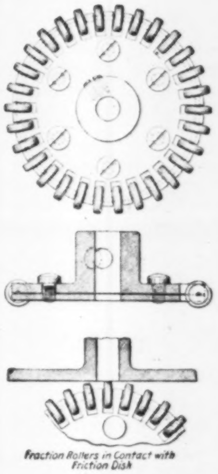

Simplex Roller Traction Wheel, showing construction and position taken in bearing against the rotating disc.

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Accurate
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Efficient

GAMON METER COMPANY
Main Office and Works:
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Water Softening Plants
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Deliver Full Capacity

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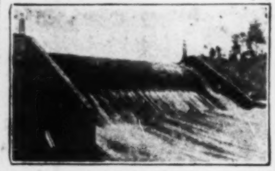

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American patents controlled by the owners,
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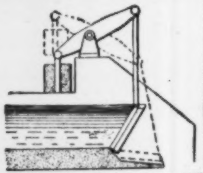
OF
WATER
LEVEL
—
MANY
STYLES



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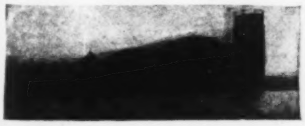
The PITTSBURGH line includes gravity and pressure filters, water softening plants, coagulant and sterilizing apparatus, and filter plant equipment.



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Purifying plants suitable for municipalities, factories, ice plants, breweries, laundries, etc.

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All Sizes All Pressures All Purposes

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This Mark on a Casting—

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SPECIAL CASTINGS

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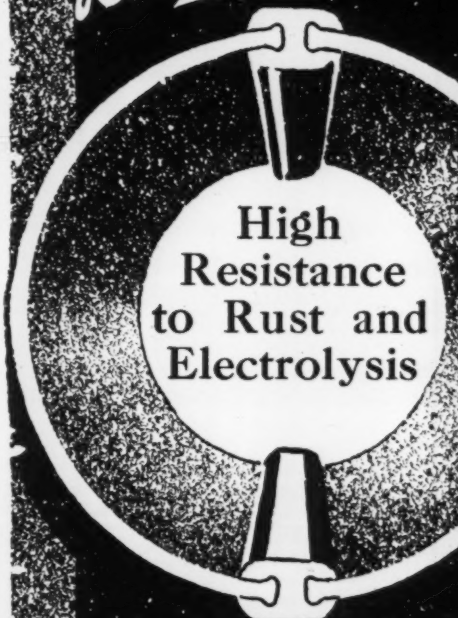

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A double suction pump for large volume.

It will move your water.

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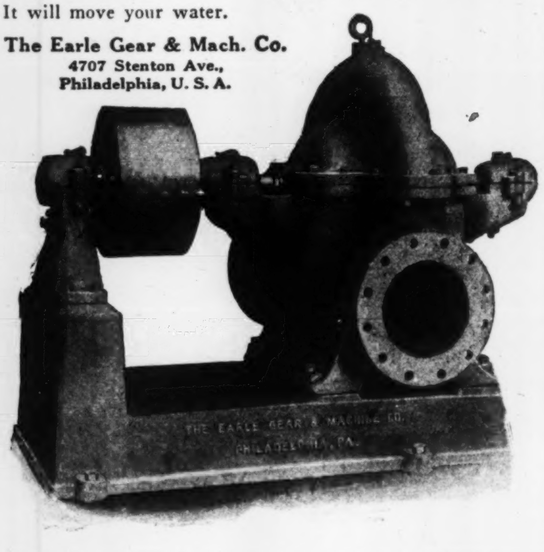

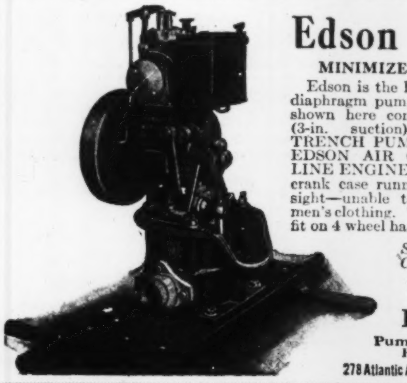

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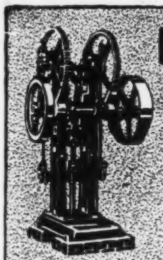

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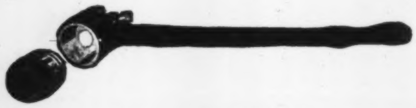
No Skill Required

Any laborer can set the pace on a bolt job if he has a



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The reversible ratchet feature of the Favorite Wrench eliminates all lost motion. There is no useless work as with the old fashioned open-end wrench.

Another big feature is the socket head. It can't slip off the nut, no matter how fast the wrench is worked.

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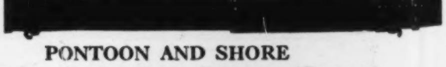

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Elbows, Branches, Ball Joints, Valves, Steel Pontoons
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The first successful self-contained fire pump equipment was a Lea-Courtenay centrifugal pump coupled to a gasoline engine. One of the many distinct advantages of a pump of this type is there is no stand by charge for electrical current; neither does it rely on the city electric light plant for its power.

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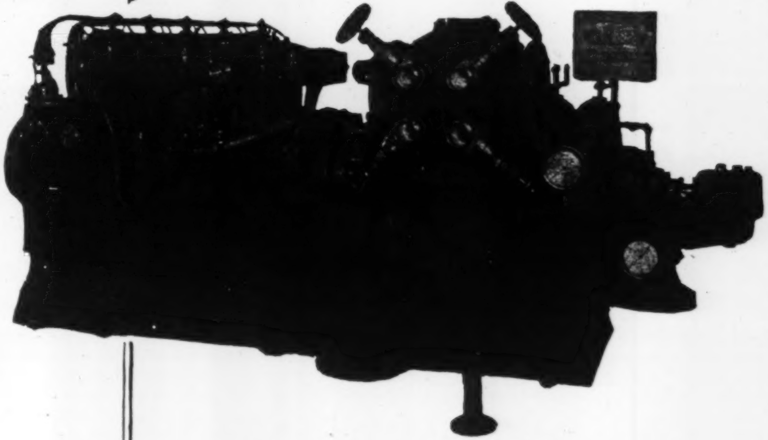

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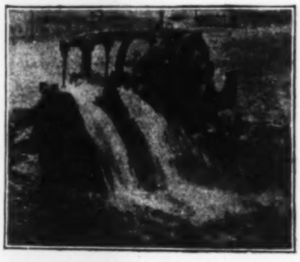
Manufacturers of Centrifugal Pumping Machinery

2000 T

ATLANTIC PUMPING ENGINES



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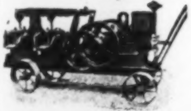

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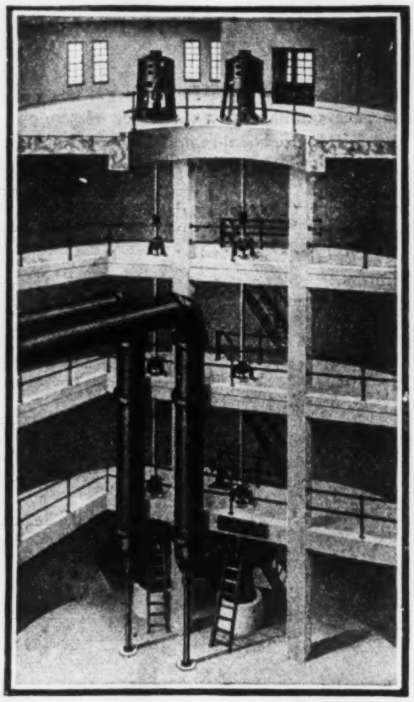

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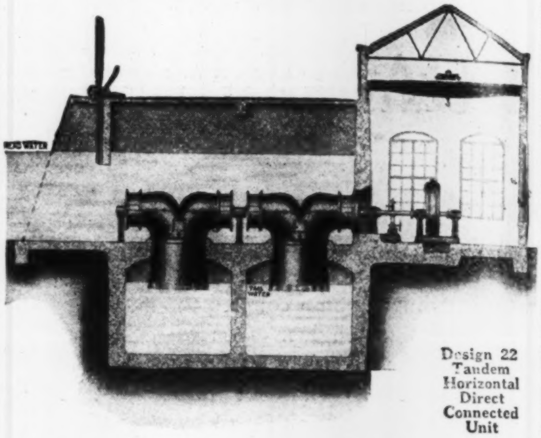

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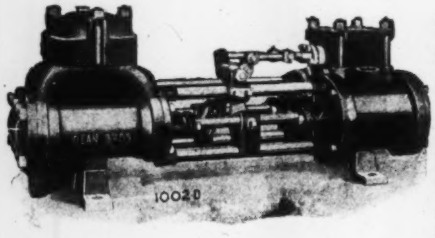

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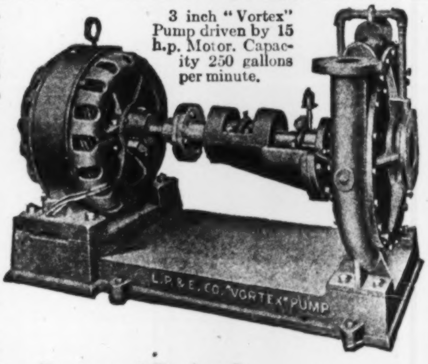

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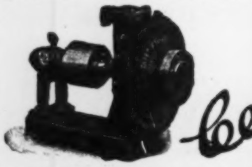

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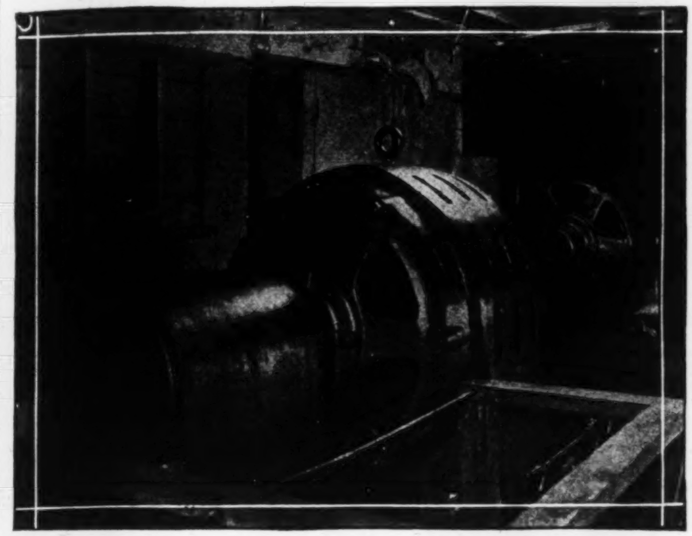

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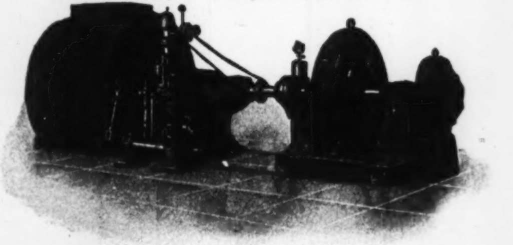

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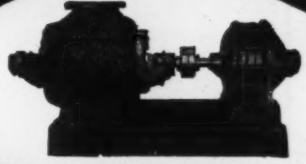

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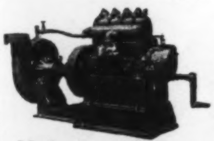

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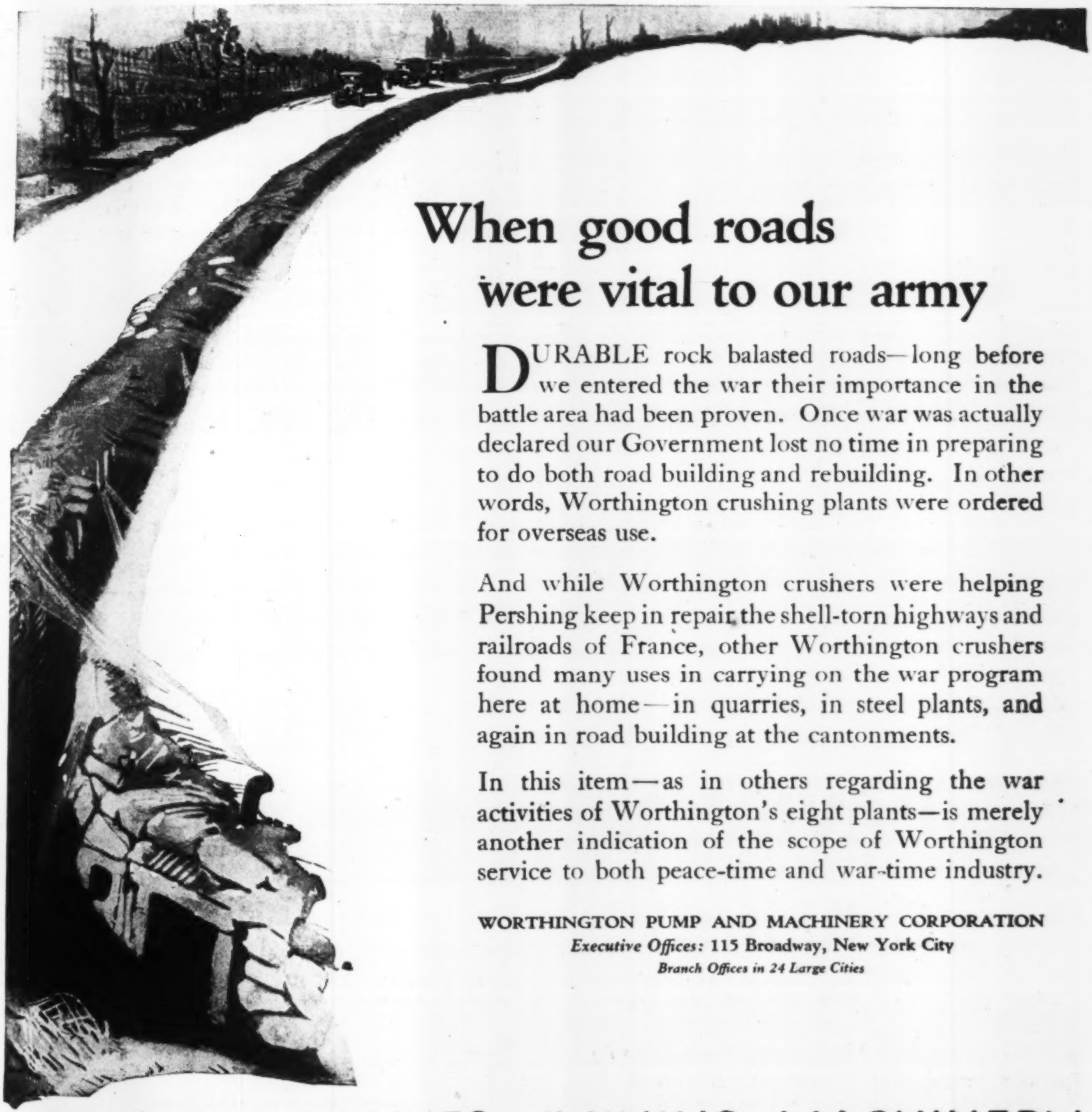

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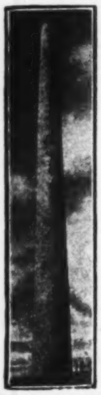

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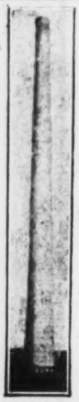

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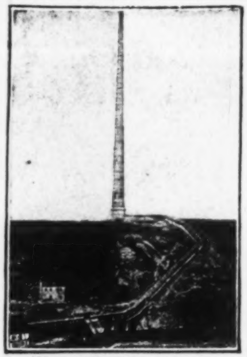

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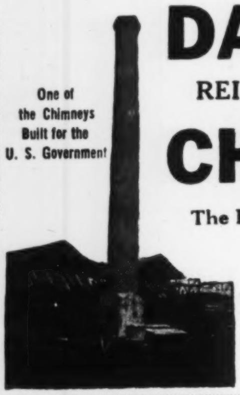

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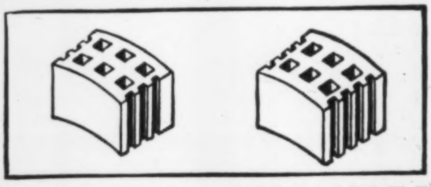

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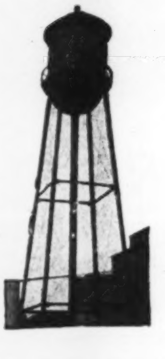

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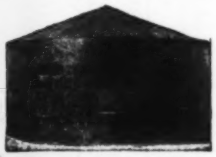

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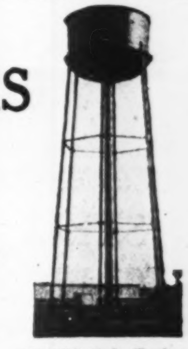

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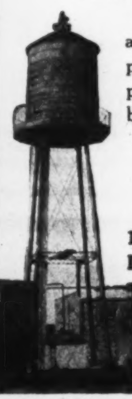

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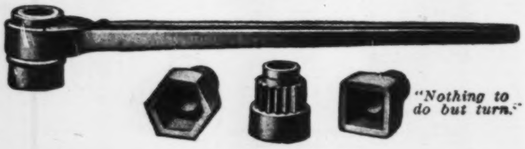

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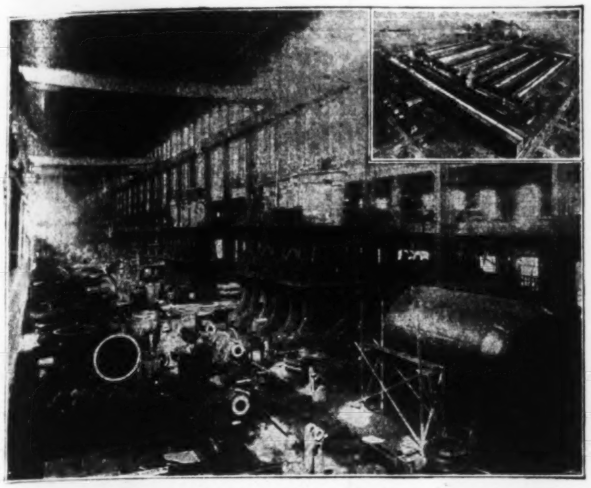

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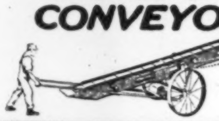

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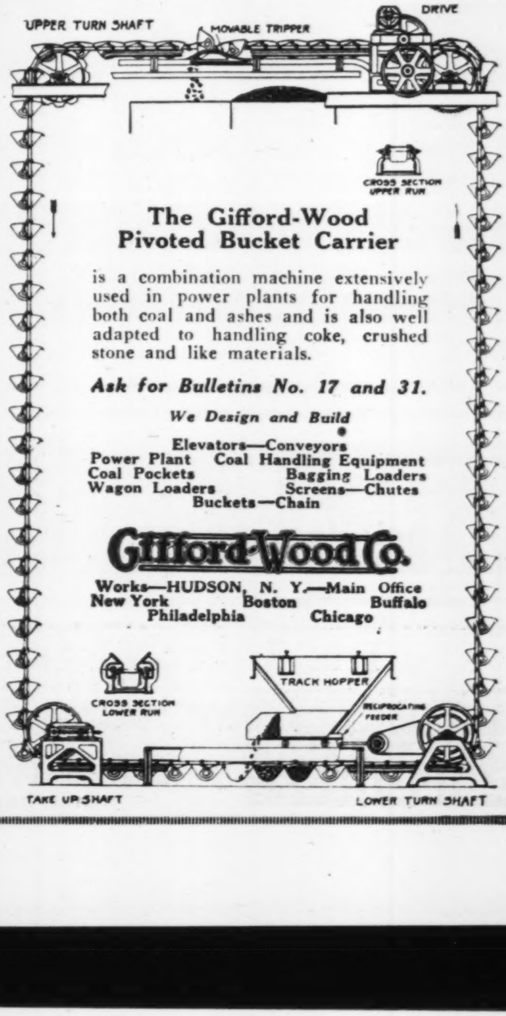

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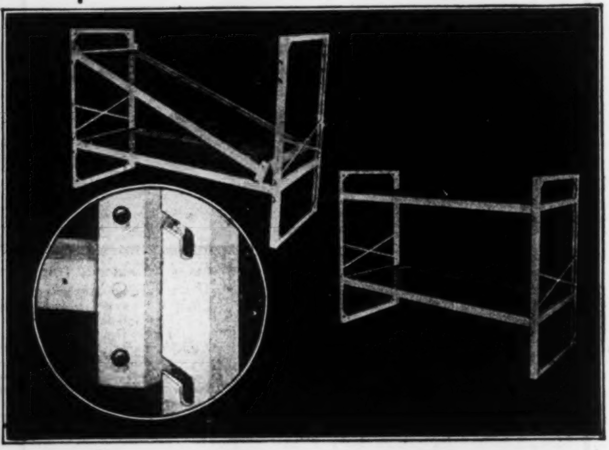

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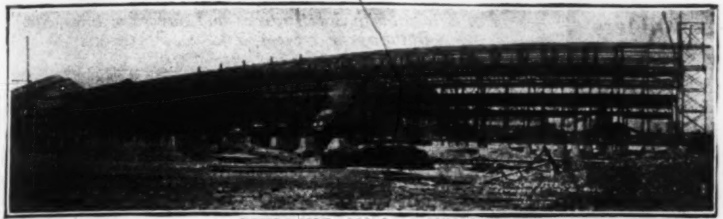

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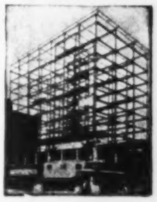

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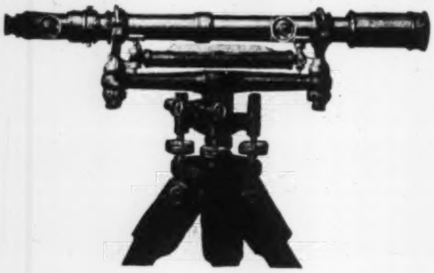

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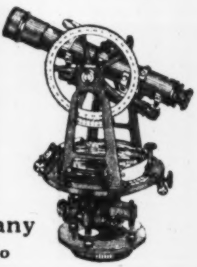

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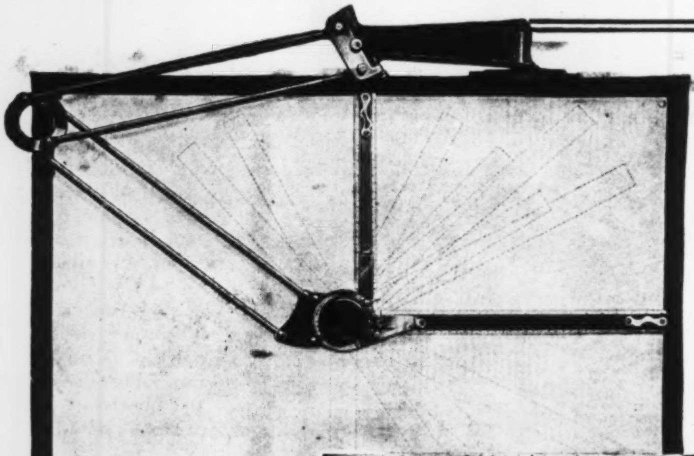

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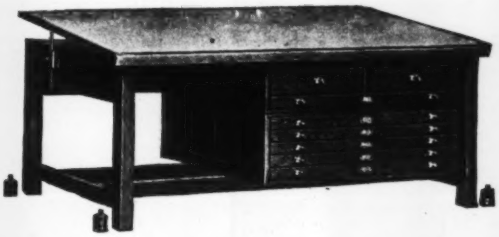

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  - Ransome Concrete Machinery Co.
- **Blast Furnaces and Fittings**
  - Petroleum Iron Works Co.
- **Blocks and Tackle**
  - Boston & Lockport Block Co.
  - Hudson Block Co.
  - Topping Bros.
- **Blowers, Pressure**
  - American Gas Furnace Co.

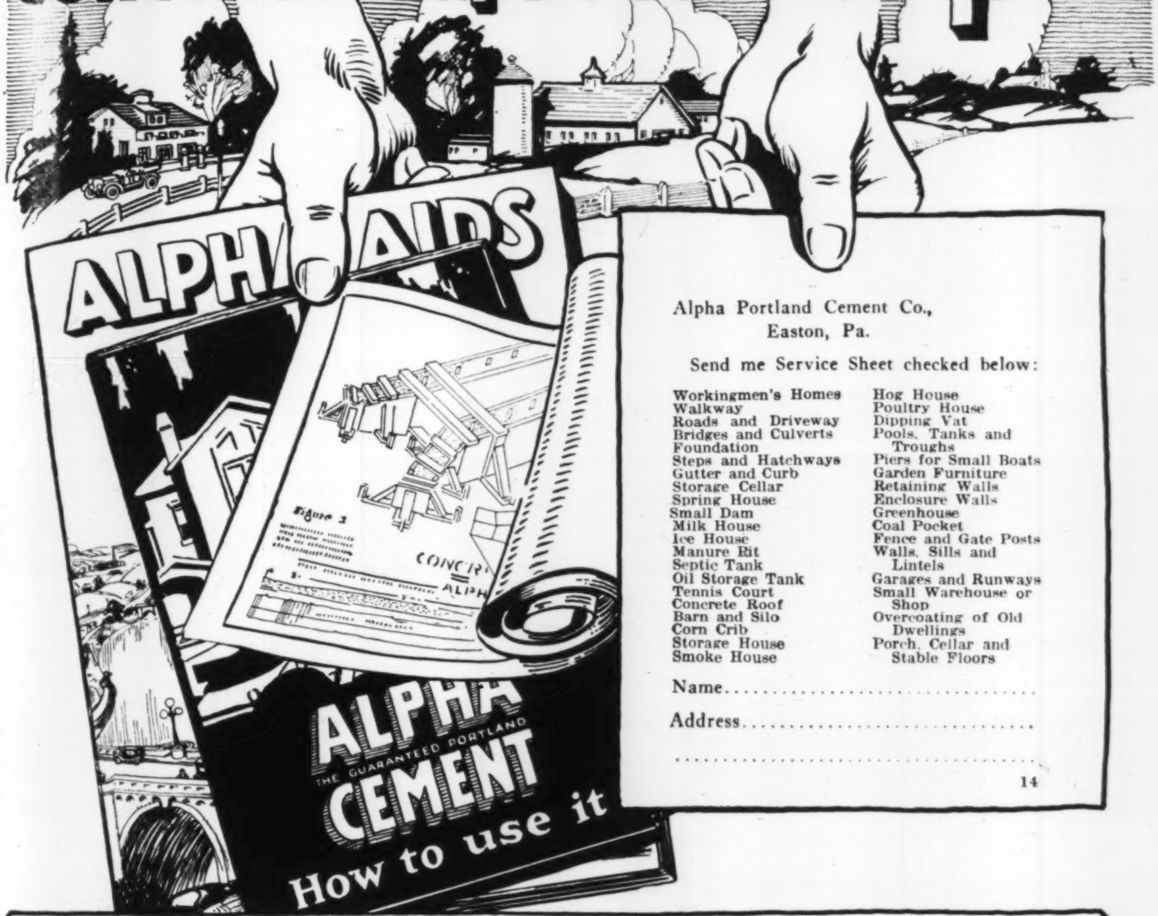
WHAT AND WHERE TO BUY

Equipment, Apparatus and Supplies Used in the Civil Engineering and Contracting Fields with Names of Manufacturers and Distributors

See Last Page [illegible]

- **Blue Printing Machines**
  - Wickes Bros.
- **Boilers**
  - Abendroth & Root Mfg. Co.
  - Babcock & Wilcox Co.
  - Coatesville Boiler Works
  - Flory Mfg. Co., S.
  - Leffel & Co., James
  - Lidgerwood Mfg. Co.
- **Boilers, Upright**
  - Flory Manufacturing Co., S.
- **Bolts, Nails, Nuts, Rivets & Spikes**
  - Topping Bros.
- **Books, Engineering and Technical**
  - McGraw-Hill Book Co.
  - Wiley & Sons, Inc., John
- **Boxes, Annealing**
  - Blaw-Knox Co.
  - Petroleum Iron Works Co.
- **Brakes, Air**
  - Westinghouse Traction Brake Co.
- **Braces, Extension Trench**
  - Kalamazoo Foundry & Machine Co.
- **Brick, Machinery**
  - Lakewood Engineering Co.
- **Bricks, Paving**
  - Metropolitan Paving Brick Co.
- **Bridges**
  - American Bridge Co.
  - Belmont Iron Works
  - Berlin Construction Co.
  - Bethlehem Steel Bridge Corp.
  - Blaw-Knox Co.
  - Boston Bridge Works
  - Eastern Bridge & Struc. Co
  - Fort Pitt Bridge Works
  - Kaarsberg, H. S.
  - Kellogg Structural Steel Co.
  - Kenwood Bridge Co.
  - King Bridge Co.
  - Lackawanna Bridge Co.
  - Louisville Bridge & Iron Co.
  - McClintic-Marshall Co.
  - Milwaukee Bridge Co.
  - Minn. Steel & Machinery Co.
  - Missouri Valley Bridge & Iron Co.
  - Morava Construction Co.
  - Mount Vernon Bridge Co.
  - O'Rourke Engineering Co.
  - Penn. Bridge Co.
  - Phœnix Bridge Co.
  - Pittsburgh Des Moines Steel Co.
  - Raymond Concrete Pile Co.
  - Riverside Bridge Co.
  - Shoemaker & Co., Lewis F.
  - Snare & Triest Co.
  - Strobel Steel Construction Co.
  - Toledo Bridge & Crane Co.
  - Virginia Bridge & Iron Co.
  - Wisconsin Bridge & Iron Co.
- **Bridges, Bascule**
  - Strobel Steel Construction Co.
- **Bridges Operating Mchy.**
  - Earle Gear & Machine Co.
- **Buckets, Automatic Dumping**
  - Buffalo Hoist & Derrick Co.
  - Lakewood Engineering Co.
- **Buckets, Clam Shell**
  - Advance Engineering Co.
  - Blaw-Knox Co.
  - Brosius, Edgar E.
  - Brown Hoisting Machinery Co.
  - Browning Co., The
  - Buffalo Hoist & Derrick Co.
  - Haiss Manufacturing Co. Inc., Geo.
  - Hayward Co.
  - Industrial Works
  - Lakewood Engineering Co.
  - McMyler Interstate Co.
  - Mead Morrison Mfg. Co.
  - Orton & Steinbrenner
  - Owen Bucket Co.
  - Vulcan Iron Works, Jersey City, N. J.
  - Williams Co., G. H.
- **Buckets, Concrete**
  - Buffalo Hoist & Derrick Co.
  - Insley Manufacturing Co.
  - Lakewood Engineering Co.
  - Smith Co., T. L.
  - Union Iron Works
- **Buckets, Dragline**
  - Brown Hoisting Machinery Co.
  - Hayward Co.
- **Buckets, Dredging and Excavating**
  - Blaw-Knox Co.
  - Marion Steam Shovel Co.
  - Mead Morrison Manufacturing Co.
  - Union Iron Works
- **Buckets, Electric Motor**
  - Hayward Co.
- **Bucket Elevators**
  - (See Elevators, Bucket)
- **Buckets, Orange Peel**
  - Browning Co., The
  - Haiss Manufacturing Co., Inc., Geo.
  - Hayward Co.
  - Industrial Works
  - McMyler Interstate Co.
  - Mead Morrison Mfg. Co.
  - Orton & Steinbrenner Co.
  - Owen Bucket Co.
  - Vulcan Iron Wks., Jersey City, N. J.
- **Building Paper**
  - Carey Co., Philip
- **Buildings, Steel**
  - Blaw-Knox Co.
  - Ferguson Co., H. K.
  - Milliken Bros. Manufacturing Co.
  - Truscon Steel Co.
- **Bunks and Cots**
  - Fort Pitt Bedding Co.
  - Southern-Rome Co.
- **Burners, Oil**
  - Spray Manufacturing Co.
- **Cableways**
  - Flory Manufacturing Co. S.
  - Lidgerwood Manufacturing Co.
  - Roebling's Sons Co., J. A.
  - Waterbury Co.
- **Cableway Excavators**
  - (See Excavators, Cableway).
- **Caissons**
  - American Bridge Co.
  - Lackawanna Steel Co.
  - O'Rourke Engineering Co
  - Westinghouse, Church, Kerr Co.
- **Cassions, Cylinder**
  - Westinghouse, Church, Kerr Co.
- **Cars, Air Side Dump**
  - Western Wheeled Scraper Co.
  - Youngstown Steel Car Co.
- **Cars, Concrete**
  - Lakewood Engineering Co.
  - Youngstown Steel Car. Co.
  - Smith Co., T. L.
- **Cars, Industrial V Dump**
  - Atlas Car & Mfg. Co.
  - Easton Car & Construction Co.
  - Lakewood Engineering Co.
  - Ramapo Iron Works
  - Smith Co., T. L.
  - Whiting Foundry Equipment Co.
  - Youngstown Steel Car Co.
- **Cars, Tank**
  - Pennsylvania Tank Car Co.
  - Petroleum Iron Works Co
- **Carts, Concrete**
  - Insley Mfg. Co.
  - Lakewood Engineering Co.
  - Ransome Concrete Machinery Co.
  - Smith Co., T. L.
- **Castings, Iron and Steel**
  - American Bridge Co.
  - American Cast Iron Pipe Co.
  - Central Foundry Co
  - Fox & Co., John
  - Jeffrey Manufacturing Co
  - Lakewood Engineering Co
  - Lynchburg Foundry Co
  - Marion Malleable Iron Wks.
  - Marion Steam Shovel Co.
  - U. S. Cast Iron Pipe & Foundry Co.
  - Warren Foundry & Machine Co.
- **Castings, Street and Sewer**
  - Central Foundry Co.
  - Lynchburg Foundry Co.
  - Sessions Foundry Co.
  - U. S. Cast Iron Pipe & Foundry Co.
- **Cement**
  - Alpha Portland Cement Co.
  - Dexter Portland Cement Co.
  - French & Co., Sam'l H.
  - Lawrence Cement Co.
  - Sandusky Cement Co.
  - Vulcanite Portland Cement Co.
- **Cement-Gun**
  - Cement-Gun Co.
- **Cement-Making Machinery**
  - Austin Co., Inc., F. C.
  - Vulcan Iron Works of Wilkes-Barre
  - Worthington Pump & Machinery Corp.
- **Cement Tool**
  - Abram Cement Tool Co.
- **Centers, Steel, Collapsible**
  - Blaw-Knox Co.
- **Chain**
  - Speidel, J. G.
  - Topping Bros.
- **Chain, Steel and Malleable Sprocket**
  - Foote Conirete Machinery Co.
  - Jeffrey Manufacturing Co
  - Webster Manufacturing Co.
- **Chains, Transmission**
  - Jeffrey Manufacturing Co
- **Channelers**
  - Ingersoll-Rand Co.
  - Sullivan Machinery Co.
- **Chimneys, Concrete**
  - Davidson Construction Co.
  - General Concrete Construction Co.
  - Heine Chimney Co.
  - Rust Engineering Co.
  - Singer Chimney Co.

PRACTICAL Suggestions on Concrete Improvements—FREE



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Easton, Pa.

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Poultry House
Dipping Vat
Pools, Tanks and Troughs
Piers for Small Boats
Garden Furniture
Retaining Walls
Enclosure Walls
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14

WE BELIEVE strongly in what we are pleased to call "Service Advertising." About one per cent. of the space in our literature is devoted to telling how we make cement as good as it can be made. The other ninety-nine per cent. is used in practical examples and descriptions of the wonderful possibilities of concrete construction. If you live east of the Mississippi, ask us for a free copy of Handbook No. 14, entitled "Alpha Cement—How to Use It," 96 pages illustrated, our magazine Alpha Aids, and the service sheet on the subject in the above list that interests you.

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- Heine Chimney Co.
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- Kellogg Co., M. W.
- Rust Engineering Co.
- Singer Chimney Co.

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- Blaw-Knox Co.
- Chicago Bridge & Iron Wks
- Petroleum Iron Works Co.

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- Wallace & Tiernan Co., Inc.

Chlorine, Liquid
- Electro Bleaching Gas Co.
- Wallace & Tiernan Co., Inc

Chutes, Concrete
- Insley Manufacturing Co.
- Lakewood Engineering Co.
- Oshkosh Mfg. Co.
- Ransome Concrete Machinery Co.

Clutches, Friction
- Caldwell Co., W. E.
- Webster Manufacturing Co.

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- Living-Stone Co., The

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- Sonneborn Sons, Inc., L.
- Trus-Con Laboratories

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- Laclede Steel Co.
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- Witherow Steel Co.

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- Dean Bros. Steam Pump
- Worthington Pump & Machinery Corp.

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- Jeffrey Manufacturing Co.
- Portable Machinery Co.
- Robins Conveying Belt Co

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- Gifford-Wood Co.
- Webster Manufacturing Co

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- Spray Engineering Co.

Cooling Towers
- Spray Engineering Co.

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- Berger Manufacturing Co.
- Consolidated Expanded Metal Cos.
- Truscon Steel Co.

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- Brown Hoisting Machinery Co.
- Browning Co., The
- Byers Machine Co., J. F.
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- Industrial Works
- McMyler Interstate Co.
- Marion Steam Shovel Co.
- Ohio Locomotive Crane Co.
- Orton & Steinbrenner Co.
- Terry Manufacturing Co., Edw. F.

Cranes, Traveling
- Brown Hoisting Machinery Co.
- Browning Co., Victor R.
- Bucyrus Co.
- Pawling & Harnischfeger Co.
- Terry Manufacturing Co., Edw. F.
- Terry & Tench Co., Inc.
- Toledo Bridge & Crane Co.
- Whiting Foundry Equipment Co.

Cranes, Wrecking
- Browning Co., The
- Industrial Works

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- American Creosoting Co.
- Jennison-Wright Co.
- Ohio Wood Preserving Co.
- Republic Creosoting Co.

Creosoting and Creosoting Oils
- American Creosote Works
- Barrett Co.
- Carbolineum Wood Preserving Co.
- Jennison-Wright Co.
- Northeastern Co.
- Republic Creosoting Co.
- Wyckoff Pipe & Creosoting Co.

Creosoted Wood
- Jennison-Wright Co.

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- Allis-Chalmers Manufacturing Co.
- Bacon, Earle C.
- Jeffrey Manufacturing Co.
- Orton & Steinbrenner Co.
- Raymond Bros. Impact Pulverizer Co.
- Smidth & Co., F. L.
- Smith Co., T. L.
- Universal Road Machinery Co.
- Worthington Pump & Machinery Corp.

Culverts, Corrugated
- Canton Culvert & Silo Co.
- Northwestern Steel & Iron Works

Culverts, Metal
- Newport Culvert Co., Inc.

Culverts, Nestable & Riveted Corrugated
- Canton Culvert & Silo Co.
- Northwestern Steel & Iron Works

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- Fletcher Co., H. E.

Curbs, Steel Protected
- Truscon Steel Co.

Cutting Blowpipes, Oxy-Acetylene
- Linde Air Products Co.
- Milburn Co., Alex.

Cylinders, Compressed Air, Gas, etc.
- National Tube Co. Works

Dams
- O'Rourke Engineering Co.

Dams, Concrete
- Westinghouse, Church, Kerr Co.

Derricks and Derrick Fittings
- Buffalo Hoist & Derrick Co.
- Byers Machine Co., J. F.
- Hayward Co.
- Insley Manufacturing Co.
- Lidgerwood Manufacturing Co.
- McMyler Interstate Co.
- Terry Manufacturing, Edw. F.
- Terry & Tench Co., Inc.

Disinfecting Chemicals
- Arnold Hoffman Co., Inc.
- Electro Bleaching Gas Co.
- Wallace & Tiernan Co., Inc.

Distributors, Pressure Oil
- (See Road Oilers, Pressure.)

Ditching Machinery
- (See Excavators.)

Diving Apparatus
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Docks and Harbor Work
- Canal Construction Co., Inc.

Doors and Shutters, Steel Rolling
- Detroit Steel Products Co.
- Lupton Sons Co., David

Drafting Machines
- Universal Drafting Machine Co.

Drafting Room Furniture
- Dietzgen Co., Eugene
- Economy Drawing Table & Manufacturing Co.
- Hamilton Manufacturing Co.

Drawing Material
- Dietzgen Co., Eugene
- Hamilton Manufacturing Co.
- Keuffel & Esser Co.
- Kolesch & Co.
- Vincent, Geo.

Drawing Tables
- (See Tables and Boards, Drawing.)

Dredges
- Hayward Co.
- Lidgerwood Manufacturing Co.
- Marion Steam Shovel Co.
- Vulcan Iron Works, Jersey City, N. J.

Dredges, Dipper
- Austin Co., Inc., F. C.
- Bay City Dredge Works
- Bucyrus Co.
- Flory Manufacturing Co., S
- Osgood Co., The.

Dredges, Hydraulic
- Bucyrus Co.
- Ellicott Machine Corporation
- Marion Steam Shovel Co.
- Morris Machine Works

Drills, Air
- Independent Pneumatic Tool Co.

Drills, Core
- Ingersoll-Rand Co.
- Keystone Driller Co.
- McKiernan-Terry Drill Co.
- Sullivan Machinery Co.

Drills, Electric
- Independent Pneumatic Tool Co.

Drills, Hammer
- Denver Rock Drill Co.
- Ingersoll-Rand Co.
- McKiernan-Terry Drill Co.
- Sullivan Machinery Co.

Drills, Pneumatic
- Independent Pneumatic Tool Co.

Drills, Rock
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- Denver Rock Drill Co.
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- McKiernan-Terry Drill Co.
- Schramm and Son, Inc., Chris. D.
- Sullivan Machinery Co.

Drill Sharpening Machinery
- Denver Rock Drill Manufacturing Co.

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- Blaw-Knox Co.
- Hayward Co.

Dryers
- American Process Co.

Dryers, Clay, Coal, Stone and Sand
- Fuller Engineering Co.

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- Pacific Flush Tank Co.

Electrical Wires and Cables
- General Electric Co.

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- Jeffrey Manufacuring Co.
- Ohio Locomotive Crane Co.
- Smith Co., T. L.
- Webster Manufacturing Co.

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- Insley Manufacturing Co.
- Oshkosh Mfg. Co.
- Ransome Concrete Machinery Co.
- Smith Co., T. L.

Elevators, Concrete Grain
- Davidson Construction Co.

Elevators, Factory
- Ridgway & Son Co., Craige
- Speidel, J. G.

Engineers and Contractors
- Bradley Co., Walter
- Cement Gun Constr. Co. Co.
- Dewey Cement Gun Construction Co.
- Ferguson Co., H. K.
- General Engineering & Construction Co.
- Guarantee Construction Co.
- Kaarsberg, H. S.
- Raymond Con. Pile Co.
- Smith, Hauser & MacIsaac, Inc.
- Terry & Tench Co., Inc.
- Turner Constr. Co.
- Westinghouse, Church, Kerr Co.
- Whitehead & Kales Co.
- (See also Directory of Engineers.)

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- Ainsworth & Son, Wm.
- Beckmann Co., L.
- Defiance Manufacturing Co.
- Dietzgen Co., Eugene
- Gurley, W. & L. E.
- Hamilton Manufacturing Co.
- Higgins & Co., Chas. M.
- Keuffel & Esser Co.
- Kolesch & Co.
- National Tracing Cloth Co.
- Weber & Co., F.
- Weiss Instrument Co.
- White Co., David

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- Allis-Chalmers Manufacturing Co.
- Chicago Pneumatic Tool Co
- Ellicott Machinery Corporation
- Schramm and Son, Inc., Chris. D.
- Worthington Pump & Mchy. Corp.

Engines, High Duty Water-Works
- Allis-Chalmers Manufacturing Co.
- Morris Machine Works

Engines, Hoisting
- (See Hoists)

Engines, Portable
- Leffel & Co., James
- Worthington Pump & Machinery Corp.

Excavating Mchry.
- Byers Machine Co., J. F.

Excavators, Cableway
- Lidgerwood Manufacturing Co.

Excavators, Ditch & Trench
- Austin Co., Inc., F. C.,
- Buckeye Traction Ditcher Co.
- Bucyrus Co.
- Byers Machine Co., J. F.
- Fritz & Co., Inc., W. G.
- Marion Steam Shovel Co.
- Owensboro Ditcher & Grader Co.
- Pawling & Harnischfeger Co.

Excavators, Dragline
- Austin Co., Inc., F. C.,
- Bucyrus Co.
- Byers Machine Co., J. F.
- Hayward Co.
- Marion Steam Shovel Co.
- Osgood Co., The
- Pawling & Harnischfeger Co.

Expanded Metal
- Berger Manufacturing Co.
- Consolidated Expanded Metal Cos.
- Truscon Steel Co.

Export Agencies
- Allied Construction Machinery Corp.
- American Steel Export Co.

Fences, Wire
- American Fence Constr. Co.
- Cyclone Fence Co.

Filing Cabinets
- Economy Drawing Table Co.

Filters, Water, Municipal & Industrial
- Amer. Water Softener Co.
- Hungerford & Terry, Inc.
- International Filter Co.
- N. Y. Continental Jewell Filtration Co.
- Norwood Engineering Co.
- Pittsburgh Filter Manufacturing Co.
- Roberts Filter Manufacturing Co.
- Scaife & Sons Co., Wm. B.
- Simplex Valve & Meter Co

Filing Cabinets
- Berger Manufacturing Co.

Fire Engines, Auto
- White Co.

Fire Hydrants
- Flower-Stephens Manufacturing Co.

Fireproof Materials and Construction
- Berger Manufacturing Co
- Detroit Steel Products Co.
- Keasbey & Mattison Co.

Floor Hardener, Concrete
- (See Concrete Floor Hardener.)

Floor, Wood Block
- Barrett Co.
- Carter Bloxonend Flooring Co.
- Republic Creosoting Co.
- Jennison-Wright Co.

Flooring, Fireproof
- Irving Iron Works

Forgings
- Carnegie Steel Co.

Form Clamps
- Insley Mfg. Co.
- M. & M. Adjustable Wire Clamp Co.
- Marion Malleable Iron Works
- Universal Clamp Co.

Forms, for Culverts, Roads, Sewers, Tunnels, etc.
- Blaw-Knox Co.
- Foote Concrete Machinery Co.
- Heltzel Steel Form & Iron Co.
- Northwest Steel & Iron Works

Forms for Curbs & Gutters
- Blaw-Knox Co.

Forms for Walls, Building Construction, Etc.
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- Heltzel Steel Form & Iron Co.

Foundations
- American Bridge Co.
- Cranford Construction Co.
- Lackawanna Steel Co.
- MacArthur Concrete Pile & Foundation Co.
- Raymond Concrete Pile Co.
- Smith, Hauser & MacIsaac, Inc.
- Underpinning & Foundation Co.
- Westinghouse, Church Kerr Co.

Foundry Equipment
- Whiting Foundry Equipment Co.

Frogs and Switches, Railway
- Lakewood Engineering Co.
- Ramapo Iron Works

Furnaces, Annealing and Tempering
- American Gas Furnace Co.
- General Electric Co.

Furnaces, Gas
- American Gas Furnace Co.

Garbage-Disposal Apparatus
- Jeffrey Manufacturing Co., The

Gas Chlorine
- Electro Bleaching Gas Co..

Gas Producers
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- Worthington Pump & Mchry. Co.

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- Coffin Valve Co.
- Coldwell-Wilcox Co.
- Fargo Engineering Co.
- Flower Valve Manufacturing Co.

Gauges, Loss of Head
- Simplex Valve & Meter Co

Gears, Silent
- General Electric Co.

Gauges, Rate of Flow
- Simplex Valve & Meter Co.

Generators, Electric
- Allis-Chalmers Manufacturing Co.
- General Electric Co.
- Universal Motor Co.

Glass Construction
- Detroit Steel Products Co.

Glass, Fireproof
- (See Wire Glass)

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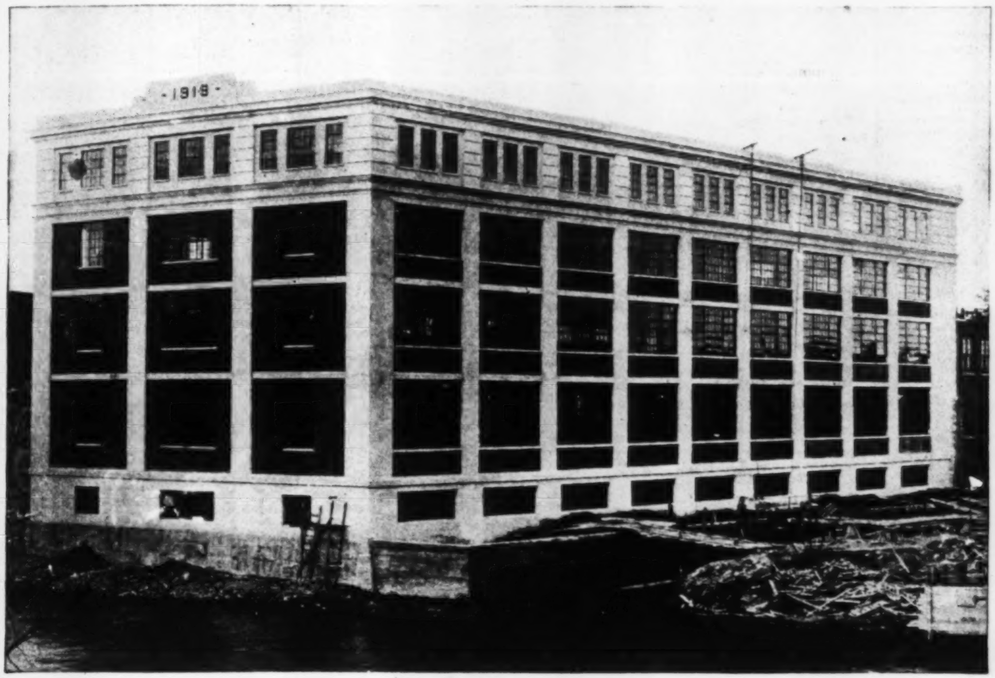
- Woodward Governor Co.

Graders, Road
- Koehring Machine Co.
- Ownesboro Ditcher & Grader Co.
- Western Wheeled Scraper Co.

Granite
- Rockport Granite Co



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Howe Rubber Co., New Brunswick, N. J.
Sanford Mills, Sanford, Me.
Amer. Agr. Chem. Co., Everett, Mass.
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The Gt. A. & P. Tea Co., Jersey City, N. J.
Wappler Electric Co., Inc., Brooklyn, N. Y.
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Pirika Chocolate Co., Brooklyn, N. Y.
Robertson-Cataract Electric Co., Buffalo, N. Y.

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BUFFALO
Prudential Bldg.

BOSTON
Oliver Ditson Bldg.
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Dixon Crucible Co., Joseph

Grates, Chain
Green Engineering Co.

Grating, Subway
Irving Iron Works

Gravel Washing Plants
Sauerman Bros.

Hammers, Pneumatic
Independent Pneumatic Tool Co.

Hammers, Steel Pile
(See Pile Hammers, Steam)

Heaters, Concrete Water
Lakewood Engineering Co.

Hoists, Chain
Speidel, J. G.

Hoists, Concrete Tower
Insley Manufacturing Co.
Lakewood Engineering Co.

Hoists, Contractors' Electric
Buffalo Hoist & Derrick Co.
Byers Machine Co., John F.
Ingersoll-Rand Co.
Lidgerwood Manufacturing Co.
Mead-Morrison Manufacturing Co.
"New Way" Motor Co., The
Orr & Sembower Co.
Westinghouse Electric & Mfg. Co.

Hoists, Contractors, Gasoline
Lidgerwood Manufacturing Co.
Minneapolis Steel & Machinery Co.
Schramm and Son, Inc., Chris D.

Hoists, Contractors, Steam
Buffalo Hoist & Derrick Co.
Byers Machine Co., John F.
Flory Manufacturing Co., S.
Lidgerwood Manufacturing Co.
Vulcan Iron Works of Wilkes-Barre, Pa.

Hoists, Hydraulic Gates
Dilts Machine Works, Inc.

Hoists, Pneumatic
Ingersoll-Rand Co.
Whiting Foundry Equipment Co.

Hoppers, Concrete Gravity
Insley Manufacturing Co.

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Eddy Valve Co.
Flower Valve Mfg. Co.
Norwood Engineering Co.
Rensselaer Valve Co.
Smith Manufacturing Co., A. P.
Wood & Co., R. D

Hydro Electric Construction
General Electric Co.

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Higgins & Co., Chas. M.

Incinerators
Bartlett & Snow Co., C. O.
Jeffrey Manufacturing Co.
Power Specialty Co.

Inserts, Concrete
Security Insert Co.
Truscon Steel Co.

Inspecting Laboratories
(See Directory of Engineers)

Instruments, Drawing
Keuffel & Esser Co.
Weber & Co., F.

Instruments, Surveying
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Buff & Buff Manufacturing Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Kolesch & Co.
Weiss Instrument Co.
White Co., David

Insulators, Cleat Type Switchboards
Philadelphia Electric Co. Supply Dept.

Insulators, Post Type
Philadelphia Electric Co. Supply Dept.

Insurance
Insurance Co. of North America

Iron Work, Structural and Ornamental
Christopher & Simpson Iron Works
Irving Iron Works
Snead Architectural Iron Works

Jacks, Lifting
Koch & Co., Paul W.
McKiernan-Terry Drill Co.
Norton, Inc., A. O.

Joints, Expansion, Paving
Barrett Co.
Carey Co., Philip
Truscon Steel Co.
Waring-Underwood Co.

Joint Filler, Paving
Barrett Co.
Standard Oil Co. of N. J.
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Ceneral Foundry Co., The
U. S. Cast Iron Pipe & Foundry Co.
Weston, L. A.

Kilns, Lime
Petroleum Iron Works Co.

Lamps, Arc & Incandescent
General Electric Co.
Westinghouse Electric & Mfg. Co.

Lamps, Flood
General Electric Co.

Lath, Expanded Metal
Berger Manufacturing Co.
Witherow Steel Co.

Lead Pencils
Dixon Crucible Co., Jos.

Leadite
Leadite Co., Inc., The
Robertson Co., H. H.

Lighting Plant
Universal Motor Co.

Lights, Contractors'
General Electric Co.
Milburn Co., Alex.

Lime, Hydrated
Kelley Island Lime & Transport Co.

Liquid Chlorine
Arnold, Hoffman Co.

Loaders, Wagon
(See Wagon Loaders.)

Lockers, Steel
Berger Manufacturing Co.
Lupton Sons Co., David

Locomotives, Compressed Air
Porter & Co., H. K.
Vulcan Iron Works of Wilkes-Barre, Pa.

Locomotives, Electric
American Locomotive Co.
Atlas Car & Mfg. Co.
Jeffrey Manufacturing Co., The
Lakewood Engineering Co.
Westinghouse Electric & Mfg. Co.

Locomotives, Fireless Steam
Porter Co., H. K.

Locomotives, Gasoline
Bell Locomotive Works, Inc.
Fate Co., J. D.
Vulcan Iron Works of Wilkes-Barre, Pa.

Locomotives, Steam
American Locomotive Co.
Bell Locomotive Works, Inc.
Davenport Locomotive Works
Porter Co., H. K.
Vulcan Iron Works of Wilkes-Barre, Pa.

Lubricants
Dixon Crucible Co., Joseph

Lumber
Great Southern Lumber Co.
Industrial Lumber Co.
Long Bell Lumber Co.
Southern Pines Sales Corp.
Tanner & Litchfield, Inc.

Manhole Covers
Central Foundry Co., The
Sessions Foundry Co.

Manometers
Simplex Valve & Meter Co

Metals, Perforated
Chicago Perforating Co.

Meter Boxes
Pittsburgh Meter Co.

Meter Provers
Pittsburgh Meter Co.

Meters, Boiler Feed Water
Builders Iron Foundry Co.

Meter Boxes
Cast Iron Pipe Publicity Bureau

Meters, Current
General Electric Co.
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Foundry Co.
General Electric Co.
Union Water Meter Co.

Meters, Water, Oil, Etc.
Gamon Meter Co.
General Electric Co.
Neptune Meter Co.
Pittsburgh Meter Co.
Simplex Valve & Meter Co.
Worthington Pump & Machinery Corp.

Mixers, Asphalt
(See Mixers, Hot)

Mixers, Concrete
Austin Co., Inc., F. C.
Blaw-Knox Co.
Cement-Gun Co.
Foote Concrete Machinery Co.
Jaeger Machine Co.
Lakewood Engineering Co.
Northwestern Steel & Iron Wks.
Oshkosh Mfg. Co.
Ransome Concrete Machine Co.
Schramm and Son, Inc., Chris. D.
Smith Co., T. L.
Standard Scale & Supply Co.
Worthington Pump & Machinery Corp.

Mixers, Grout
Lakewood Engineering Co.
Oshkosh Mfg. Co.
Union Iron Works

Mixers, Hot
Austin Co., Inc., F. C
Equitable Asphalt Maintenance Co.
Koehring Machine Co.

Mixers, Mortar
Austin Co., Inc., F. C.
Jaeger Machine Co.
Lakewood Engineering Co.
Oshkosh Mfg. Co.
Ransome Concrete Machinery Co.
Smith Co., T. L.

Mixers, Paving
Austin Co., Inc., F. C.
Foote Concrete Machinery Co.
Koehring Machinery Co.
Lakewood Engineering Co.
Waterloo Cement Machinery Corp.

Mixers, Pneumatic
Ransome Concrete Machinery Co.

Motors, Electric
General Electric Co.
Westinghouse Electric & Mfg. Co.
Westinghouse Traction Brake Co.

Motor Trucks
(See Trucks, Motor.)

Motor Truck Bodies
Economy Body Sales Co.

Packings
Jenkins Bros.

Paints, Metal Protective
Barrett Co.
Carey Co., Philip
Dixon Crucible Co., Joseph
Toch Bros.
Trus.-Con. Laboratories.

Partitions
Detroit Steel Products Co.
Lupton Sons Co., David

Pavements
Bitoslag Paving Co.

Paving Blocks, Brick
Metropolitan Paving Brick Co.

Paving Blocks, Granite
Rockport Granite Co.

Paving Blocks, Creosoted Wood
Jennison-Wright Co.
Republic Creosoting Co.
Wyckoff Pipe & Creosoting Co.

Penstocks
Lackawanna Steel Co.

Pile Drivers
Browning Co., The
McKiernan-Terry Drill Co.
McMyler Interstate Co.
Union Iron Works

Pile Hammers, Steam
McKiernan-Terry Drill Co.
Union Iron Wks.

Pile, Shoes
Janney-Steinmetz Co.

Piles, Concrete
Cranford Constr. Co.
MacArthur Concrete Pile & Foundation Co.
Raymond Concrete Pile Co.

Piles, Creosoted Wood
Jennison-Wright Co.

Piling, Interlocking Steel
Carnegie Steel Co.
Lackawanna Steel Co.
O'Rourke Engineering Co.

Pipe Bends
East Jersey Pipe Corp.

Pipe, Cast-Iron
Builders Iron Foundry Co.
Central Foundry Co., The
Fox & Co., John
Lynchburg Foundry Co.
U. S. Cast Iron Pipe & Foundry Co.
Van Nouhuys Machine Works
Warren Foundry & Machine Co.

Pipe, Concrete
Lock Joint Pipe Co.

Pipe, Corrugated
Canton Culvert & Silo Co.

Pipe Covering, Asbestos
Carey Co., Philip
Wyckoff & Sons Co., A.

Pipe Covering, Wood
Michigan Pipe Co.
Standard Wood Pipe Co.

Pipe, Dredge
Machold & Riddell
Thorn Co., J. S.

Pipe Fittings
Builders Iron Foundry Co.
Cast Iron Pipe Publicity Bureau
Central Foundry Co., The
U. S. Cast Iron Pipe and Foundry Co.
Westinghouse Traction Brake Co.
Weston, L. A.
Wood & Co., R. D.

Pipe Joint Compounds (Pressure)
Leadite Co., Inc., The

Pipe, Lap Welded
American Spiral Pipe Works

Pipe, Lock Bar
East Jersey Pipe Corp.

Pipe, Lock Joint
Lock Joint Pipe Co.

Pipe Lugs
Marion Malleable Iron Wks.

Pipe, Reinforced Concrete
Lock Joint Pipe Co.

Pipe, Riveted Steel
American Spiral Pipe Wks.
Blaw-Knox Co.
East Jersey Pipe Corp.
Machold & Riddell
Petroleum Iron Works Co.
Riter-Conley Co.
Tippett & Wood
Walsh's Holyoke Steam Boiler Works

Pipe, Spiral Riveted
Abendroth & Root Manufacturing Co.
American Spiral Pipc Works
Blaw-Knox Co.

Pipe, Wood
American Wood Pipe Co.
Continental Pipe Manufeifacturing Co.
Michigan Pipe Co.
Pacific Tank & Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Sons Co., A.

Pipe, Wrought Steel
National Tube Co.

Poles, Cross Arms, Etc.
Jennison-Wright Co.

Plate Punch Tables
Terry Manufacturing Co., Edw. F.

Poles, Steel Structural
Blaw-Knox Co.
Milliken Bros. Manufacturing Co.

Poles, Tubular Steel
Franklin Steel Works
National Tube Co.

Pot Heads
Philadelphia Electric Co. Supply Dept.

Pressed Steel Products
Berger Manufacturing Co.
Blaw-Knox Co.

Pulverizers
Raymond Bros. Impact Pulverizer Co.

Pumps, Air Lift
Cameron Steam Pump Works, A. S.
Ingersoll-Rand Co.
McGowan Co., John H.
Sullivan Machinery Co.

Pumps, Boiler Feed, Steam
Cameron Steam Pump Works, A. S.
Dean Bros Steam Pump Works
Earle Gear & Machine Co
McGowan Co., John H.
Platt Iron Wks.
Worthington Pump & Machinery Corp.

Pumps, Centrifugal and Multi-Stage High Lift
Allis-Chalmers Manufacturing Co.
American Well Works, The
Cameron Steam Pump Works, A. S.
De Laval Steam Turbine Co.
Earle Gear & Machine Co
Erie Pump & Engine Co.
Lawrence Pump & Engineering Co.
Lea-Courtenay Co.
McGowan Co., John H.
Manister Iron Works
Morris Machine Works
Platt Iron Wks.
Taber Pump Co.
Universal Motor Co
Worthington Pump & Machinery Corp.

Pumps, Contractors'
American Well Works, The
Barnes Mfg. Co.
Bond Co., Harold L.
Cameron Steam Pump Works
Deming Co., The
Edson Manufacturing Co.
Lea-Courtenay Co.
McGowan Co., John H.
Parker, A. A.
Schramm and Son, Inc., Chris. D.
Standard Scale & Supply Co.
Waterloo Cement Machinery Corp.
Worthington Pump & Machinery Corp.

Pumps, Deep Well
American Well Works, The
Cameron Steam Pump Works, A. S.
Cook, A. D.
Deming Co., The.
Keystone Driller Co.
McGowan Co., John H.
Worthington Pump & Machinery Corp.

Pumps, Diaphragm
Bond Co., Harold L.
Boston & Lockport Block Co.
Deming Co., The.
Edson Manufacturing Co
McGowan Co., John H.
Manister Iron Works.
Topping Bros.
Van Noubuys Machine Works.
Waterloo Cement Machinery Corporation

Pumps, Dredging and Sand
Erie Pump & Engine Co.
Lawrence Pump & Engineering Co.
McGowan Co., John H.
Marion Steam Shovel Co.
Morris Machine Works Boiler Works
Parker, A. A.
Worthington Pump & Machinery Corp.

Pumps, Elevator
McGowan Co., John H.
Worthington Pump & Machinery Corp.

Pumps, Power
Cameron Steam Pump Works, A. S.
Cook, A. D.
Dean Bros. Steam Pump Wks.
Deming Co., The
Fairbanks-Morse Co.
Lea-Courtenay Co.
McGowan Co., John H.
Manister Iron Works.
Platt Iron Wks.
Manister Iron Works.
Worthington Pump & Machinery Corp.

Pumps, Underwriters Centrifugal
Earle Gear & Machine Co.
McGowan Co., John H.
Manistee Iron Wks.
Platt Iron Wks.

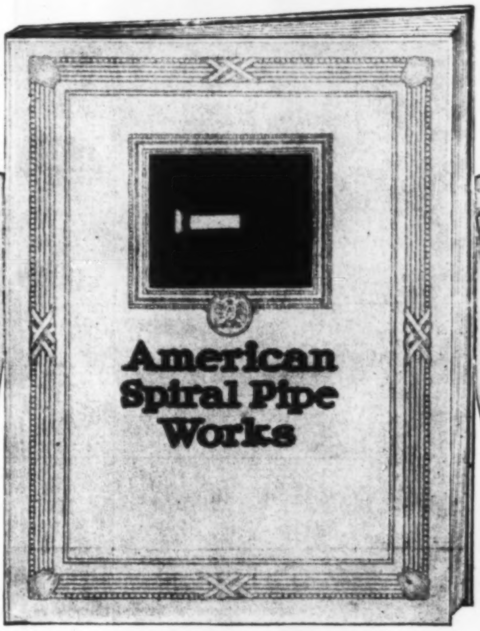
Purifiers, Feed Water
N. Y. Continental Jewell Filtration Co.
Norwood Engineering Co.

Pyrometers
Taylor Instruments Co.

Rail and Rail Joints, Fastening Specialties
Carnegie Steel Co.
Lackawanna Steel Co.

NEW PRODUCTION BOOK

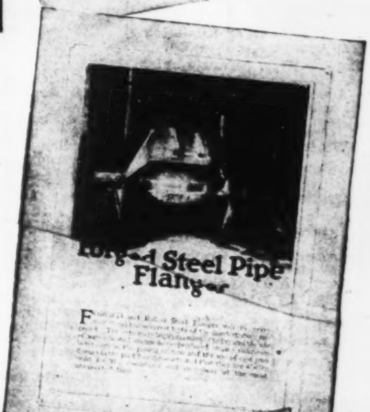
Spiral Riveted Pressure Pipe



American Spiral Pipe Works

Lap Welded Steel Pipe

Corrugated Furnaces For Land And Marine Boilers



Forged Steel Pipe Flanges

THESE booklets are filled with valuable data of service to engineers and contractors. They contain also some interesting installations of

Lap Welded and Spiral Steel Pipe

We have issued these informative booklets for general distribution.
Write for them—**Mailed Gratis on Request.**

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Manufacturers of Large Diameter Lap-Welded and Spiral Riveted Steel Pipe, Forged-Steel Pipe Flanges, Etc.

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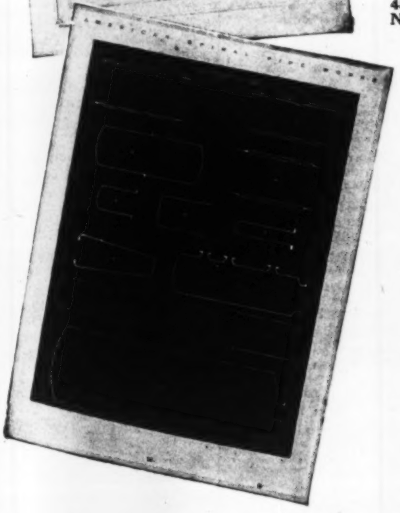
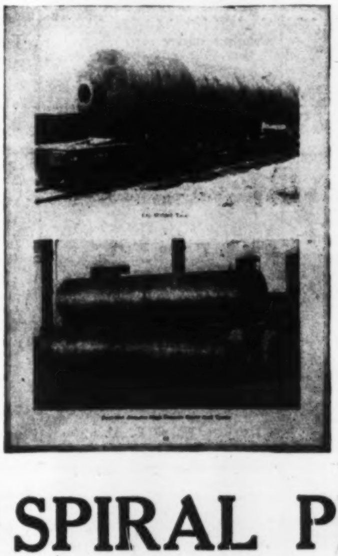
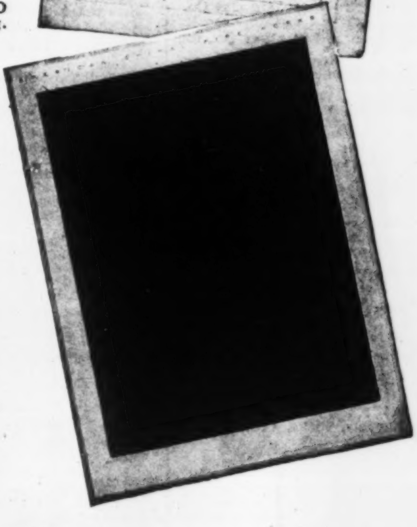
48th Avenue and West 14th Street, CHICAGO
NEW YORK OFFICE: Hudson Terminal Bldg.







AMERICAN SPIRAL PIPE WORKS

Railroad Ditchers
Ball Engine Co.

Railways, Industrial
Lakewood Engineering Co.

Reamers, Air
Independent Pneumatic Tool Co.

Recorders, Water Stage
Gurley, W. & L. E.

Reinforcing Concrete
(See Concrete Reinforcement)

Reinforcing Metal for Concrete
Berger Manufacturing Co.

Reservoirs, Aerating
Spray Engineering Co.

River and Harbor Work
Raymond Concrete Pile Co.

Road Oilers, Pressure
Barrett Co., The
Universal Road Machinery Co.

Road Oils and Preservatives
Barrett Co.
Buffalo-Springfield Roller Co.
Erie Machine Shops
Standard Oil Co., of N. J.
Standard Oil Co. of N. Y.

Rollers, Concrete
Macon Concrete Roller Co.

Rolls, Crushing
Jeffrey Manufacturing Co.

Roofing, Metal
American Sheet & Tin Plate Co.
Carey Co., Philip

Roofing Prepared
Barrett Co.
Stark Rolling Mill Co., The

Roofing, Tile
American Cement Tile Manufacturing Co.
Barrett Co.

Rope, Manila, Transmission
Plymouth Cordage Co.

Rope, Wire, Transmission, Hoisting or Haulage
American Steel & Wire Co
Leschen & Sons Rope Co.
Moon Co., Geo. C.
Roeblings Sons Co., J. A.
Waterbury Co.

Sash Operating Apparatus
Detroit Steel Products Co.
Lupton Sons Co., David

Sash Steel, Window
(See Window Sash.)

Screens, Sand, Gravel and Coal
Austin Manufacturing Co.
Chicago Perforating Co.
Webster Manufacturing Co.

Screens, Well
American Well Works, The

Searchlights
General Electric Co.

Sewage Disinfection
Electro Bleaching Gas Co.

Sewage Disposal
General Filtration Co., Inc.

Sewer Cleaning Machinery
Turbine Sewer Machine Co.

Sewers, Water Intake
Chain Belt Co.

Sharpening Machines, Drill Bit
Ingersoll-Rand Co.

Shafting
National Tube Co.

Sheaves
Haiss Manufacturing Co., Inc., Geo.

Sheets, Iron and Steel
Standard Asphalt & Refining Co.
Stark Rolling Mill Co., The

Sheets, Roofing & Siding
Stark Rolling Mill Co., The

Shelving, Steel
Berger Manufacturing Co.
Lupton's Sons Co., David

Shovels, Picks, Crow-Bars, Etc.
Topping Bros.

Shovels, Electric
Ball Engine Co.
Bucyrus Co.

Shovels, Gasoline
Thew Automatic Shovel Co.

Shovels, Steam
Ball Engine Co.
Browning Co., The
Bucyrus Co.
Osgood Co., The

Skips, Stone
Insley Manufacturing Co.
Lakewood Engineering Co.

Skylights
Luptons Sons Co., David

Slag
Carnegie Steel Co.

Spray Nozzles
Spray Engineering Co.

Spreaders, Ballast
Jordan Co., O. F.

Standpipe Tanks and Towers
Amercian Bridge Co.
Blaw-Knox Co.
Caldwell Co., W. E.
Chicago Bridge & Iron Wks.
Pacific Tank & Pipe Co.
Petroleum Iron Works Co.
Pittsburgh-Des Moines Steel Co.
Tippett & Wood

Steam Specialties
Jenkins Bros.

Steel Plate Construction
Amercian Bridge Co.
Bethlehem Steel Bridge Co.
Blaw-Knox Co.
Chicago Bridge & Iron Works
Coatesville Boiler Works
East Jersey Pipe Corp.
Franklin Steel Wks.
Heltzel Steel Form & Iron Co.
Lackawanna Steel Co.
Pennsylvania Tank Car Co.
Petroleum Iron Works Co.
Pittsburgh Des Moines Steel Co.
Tippett & Wood
Union Iron Works
Vulcan Iron Works, Jersey City, N. J.
Walsh's Holyoke Steam Boiler Works.
Williams Co., G. H.

Steel, Structural
Amercian Bridge Co.
Bellefontaine Bridge & Steel Co.
Belmont Iron Works
Berlin Construction Co.
Bethlehem Steel Bridge Corp.
Blaw-Knox Co.
Boston Bridge Works
Carnegie Steel Co.
Christopher-Simpson Iron Works.
Eastern Bridge & Structural Co.
Fort Pitt Bridge Works
Franklin Steel Works
Kalamazoo Foundry & Machine Co.
Kellogg Structural Steel Co.
Kenwood Bridge Co.
King Bridge Co.
Lackawanna Bridge Co.
Lackawanna Steel Co.
Lakewood Engineering Co.
Louisville Bridge and Iron Co.
McClintic-Marshall Co
Milliken Bros. Manufacturing Co.
Milwaukee Bridge Co.
Minneapolis Steel & Machinery Co.
Missouri Valley Bridge & Iron Co.
Mitchell-Tappen Co.
Morava Construction Co.
Mount Vernon Bridge Co.
Penn. Bridge Co.
Phœnix Bridge Co.
Pittsburgh-Des Moines Steel Co.
Riverside Bridge Co.
Shoemaker & Co., Lewis F.
Snare & Triest Co.
Snead Architectural Iron Works
Terry & Tench Co., Inc.
Toledo Bridge & Crane Co.
Virginia Bridge & Iron Co
Whitehead & Kales Co.
Wisconsin Bridge & Iron Co.

Steel Tool
Carnegie Steel Co.

Stokers
Babcock & Wilcox Co.
Green Engineering Co.

Stop Crack Fasteners
Janney-Steinmetz & Co.

Strainers, Well
Cook, A. D.

Structural Steel
Ferguson Co., H. K.

Submarine Works
Westinghouse, Church, Kerr Co.

Superheaters
Babcock & Wilcox Co.
Locomotive Superheater Co.
Power Specialty Co.

Switches, Disconnecting
Philadelphia Electric Co. Supply Dept.

Switchboards
General Electric Co.

Tables and Boards, Drawing
Defiance Manufacturing Co.
Economy Drawing Table & Manufacturing Co.
Hamilton Manufacturing Co.

Tampers, Power
Pawling & Harnischfeger Co.

Tanks, Air Compressor
East Jersey Pipe Corp.
Petroleum Iron Works Co.
Westinghouse Traction Brake Co.

Tank Lugs
Marion Malleable Iron Works

Tanks, Oil
Blaw-Knox Co.
Coatesville Boiler Works
Riter-Conley Co.

Tanks, Steel
(See Steel Plate Construction.)

Tanks, Wood
American Wood Pipe Co.
Caldwell Co., W. E.
Continental Pipe Manufacturing Co.
Pacific Tank & Pipe Co

Tapes, Steel and Metallic
Dietzgen Co., Eugene
Hamilton Manufacturing Co.
Keuffel & Esser Co.

Tar
Barrett Co.

Tents
Baker-Lockwood Mfg. Co.

Testing Laboratories
Fuller Engineering Co.
(See also Engineers' Directory)

Thermometers
Taylor Instrument Co.

Thermometers, Recording
Taylor Instrument Co.

Ties, Steel
American Bridge Co.
Carnegie Steel Co.

Tile, Roof Cement
American Cement Tile Manufacturing Co.

Towers, Concrete
(See Hoists, Conc. Tower.)

Towers, Radio
Blaw-Knox Co.
Milliken Bros. Manufacturing Co.

Towers, Transmission
Blaw-Knox Co.
Lakewood Engineering Co.
Milliken Bros. Manufacturing Co.
Riter-Conley Manufacturing Co.

Tracing Cloth
Defiance Manufacturing Co.
National Tracing Cloth Co.

Tracing Paper
Geo. Vincent

Tracks, Industrial and Portable
Easton Car & Construction Co.
Lakewood Engineering Co.

Tractors, Storage Battery
Lakewood Engineering Co.
Eagle Wagon Works
Troy Wagon Works
Watson Wagon Co.

Trailers
Eagle Wagon Works
Lakewood Engineering Co.
Troy Wagon Works
Watson Wagon Co.

Transformers
General Electric Co.

Transits and Levels
Ainsworth & Sons, Wm.
Beckmann Co., L.
Berger & Sons Co., C. L.
Buff & Buff Manufacturing Co.
Gurley, W. & L. E.
Kolesch & Co.

Transmission Machinery, Power
Bacon, Earl C.
General Electric Co.
Jeffrey Manufacturing Co.
Leffel & Co., Jas.
Westinghouse Electric & Mfg. Co.

Treads, Safety
Concrete Steel Co.
Irving Iron Works

Trench Braces
(See Braces, Extension Trench)

Trench Excavating Machinery
(See Excavators, Ditch & Trench.)

Trolleys I-Beam
Brown Hoisting Mchy. Co.
Whiting Foundry Equipment Co.

Trucks, Motor
Garford Motor Truck Co.
Eagle Wagon Co.
Troy Wagon Works
Watson Wagon Co.
White Co.

Trucks and Trailers, Factory
Lakewood Engineering Co.

Tubing, Lap-Welded and Seamless Steel
National Tube Co.

Tunnel Liner Plates
Blaw-Knox Co.

Turbines, Hydraulic
Allis-Chalmers Manuftcturing Co.
Leffel & Co., Jas.
Smith Co., S. Morgan

Turbines, Steam
De Laval Steam Turbine Co.
General Electric Co.

Turntables
Bethlehem Steel Bridge Co.
Lakewood Engineering Co
Whiting Foundry Equipment Co.

Underpinning
O'Rourke Engineering Co.
Smith, Hauser & MacIsaac, Inc.
Underpinning & Foundation Co.

Unloaders, Car and Wagons
Bonney Supply Co.
Heltzel Steel Form & Iron Co.

Valves, Air, Water, Steam and Gas
Coldwell-Wilcox Co.
Eddy Valve Co.
Golden-Anderson Valve Specialty Co.
Norwood Engineering Co.
Rensseelaer Valve Co.
Simplex Valve & Meter Co.
Smith Manufacturing Co., A. P.

Valves, Altitude
Golden-Anderson Valve Specialty Co.
Simplex Valve & Meter Co.

Valves, Angle, Check, Gate and Globe
Flower Valve Manufacturing Co.
Golden-Anderson Valve Specialty Co.
Jenkins Bros.
Simplex Valve & Meter Co.
Westinghouse Traction Brake Co.

Valves, Automatic
Golden-Anderson Valve Specialty Co.
Kennedy Valve Manufacturing Co.
Westinghouse Traction Brake Co.

Valves, Float
Golden-Anderson Valve Specialty Co.

Valves Foot
Fargo Engineering Co.
Eagle Wagon Works

Valves, Regulating
Golden-Anderson Valve Specialty Co.
Simplex Valve & Meter Co.
Westinghouse Traction Brake Co.

Valves, Return
Golden-Anderson Valve Specialty Co.

Valves, Safety
Golden-Anderson Valve
Westinghouse Traction Brake Co.
Specialty Co.
Republic Creosoting Co.

Valves, Sluice
Coffin Valve Co.
Eddy Valve Co.
Eagle Wagon Works

Ventilators
Lupton's Sons Co., David

Wagons, Asphalt
Eagle Wagon Works
Troy Wagon Works
Watson Wagon Co.

Wagons, Dump
Eagle Wago
Troy Wagon W
Watson Wagon
Western Wheeled Co.
White Co.

Wagons, Garbage
Eagle Wagon W
Troy Wagon W
Watson Wagon

Wagon Loaders
Byers Machine Co F
Clyde Iron Works
Gifford-Wood Co.
Haiss Manufacturing Co Inc., Geo.
Jeffrey Manufacturing Co
Portable Machinery Co

Washers, Cut, Cast, Malleable
Topping Bros.

Water-Main Cleaning
National Water Main Cleaning Co.

Waterproofing, Canvas
Baker-Lockwood Mfg. Co.

Waterproofing Compounds and Materials
Anti-Hydro Waterproofing Co.
Barret Co.
Carey Co., Philip
Sandusky Cement Co.
Smooth-On Manufacturing Co.
Sonneborn Sons, L.
Toch Bros.
Trus-Con Laboratories

Water Purification
Arnold, Hoffman Co., Inc.
Electro Bleaching Gas Co.
Wallace & Tiernan Co., Inc

Water Softeners
Amer. Water Softener Co.
Arnold, Hoffman Co., Inc.
International Filter Co.
N.Y. Continental Jewell Filtration Co.
Roberts Filter Manufacturing Co.
Scaife & Sons Co., Wm. B

Water Sterilization
Electro Bleaching Gas Co.
Wallace & Tiernan Co., Inc.

Water Waste Prevention
Pitometer Co., The

Water Wheels for Contr's. Equip.
Pelton Water Wheel Co.

Water Wheels, Turbine and Impulse
Allis-Chalmers Manufacturing Co.
Leffel & Co., Jas.
Pelton Water Wheel Co
Smith Co., S. Morgan

Welding Apparatus
Davis-Bournonville Co.
General Electric Co.
Linde Air Products Co.
Milburn Co., The Alexander

Well Drilling Machinery
American Well Works, The

Wheels, Sprocket
Chain Belt Co.
Hydraulic Pressed Steel Co
Jeffrey Manufacturing Co.

Whirlers
Dravo Contracting Co.

Winches, Ship, Steam and Electric
Brown Hoisting Machinery Co.
Flory Manufacturing Co., S.
Lakewood Engineering Co.
Lidgerwood Manufacturing Co.

Window Sash, Steel
Detroit Steel Products Co.
Lupton Sons Co., David
Truscon Steel Co.

Wire Mesh, Reinforcing
American Steel & Wire Co.

Wire Glass
Mississippi Wire Glass Co.

Wire Rope
(See Rope Wire)

Wood Block, Paving
Carter Bloxonend Flooring Co.

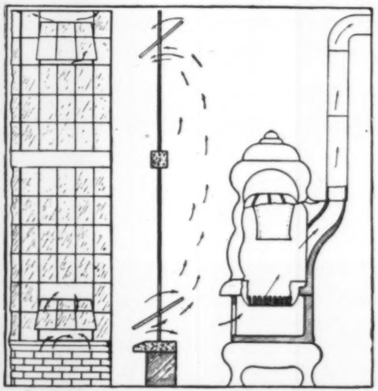
Wood Casings
Michigan Pipe Co., The

Wood Preservatives
Barrett Co.
Carbolineum Wood Preserving Co.
Northeastern Co.
Ohio Wood Preserving Co
Republic Creosoting Co.

Wrenches
Lowell Wrench Co.

FOR EVERY INDUSTRY

The Banner Laundry, Detroit, is designed along modern lines. Fenestra Solid Steel Windows are used to assure proper daylighting and ventilation, as explained below.



Getting air through a laundry is like getting air through a stove. Make your exit high and your intake low. Ventilators placed like those shown at the left of the drawing give ventilation like that secured through the stove on the right.

The Laundry—

The two big problems of every laundry owner, have been solved.

You can eliminate the steam and heat generated by washers and mangles during the summer.

You can have daylight and air equal to that outside.

Both problems are solved where Fenestra Solid Steel Windows form the sidewalls of the building.

Wide glass areas provide the light.

Make the ceiling as high as possible. Place the ventilators through which hot air exits as near the ceiling as possible. Place ventilators through which fresh air enters as near the floor as possible. Result—good ventilation.

"Enticing a Breeze Through a Laundry" is a Fenestra booklet that will interest you. Write for a copy.

DETROIT STEEL PRODUCTS COMPANY

2612 East Grand Blvd. **Detroit, Michigan**

Fenestra

SOLID STEEL WINDOWS

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RAYMOND

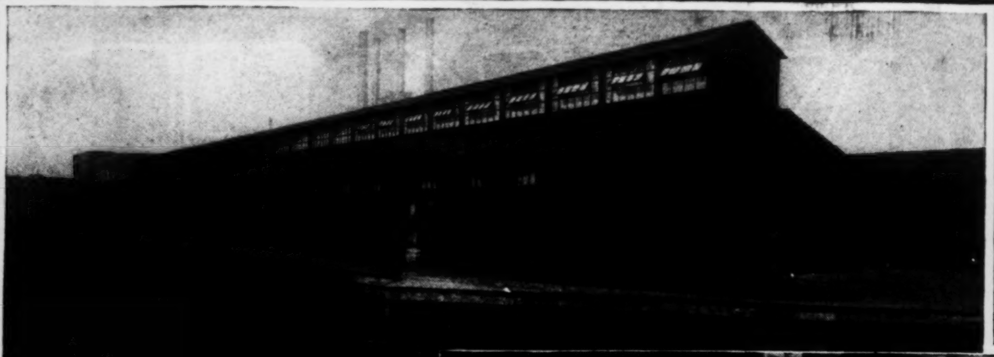
Looking down into the reinforced steel shell

Here is the interior of a driven, spirally-reinforced, steel "form" for a Raymond Concrete Pile. Here is the reason why, unknown or unguessed, underground conditions cannot distort or weaken the concrete pile column. The shell is left in the ground.

Raymond Concrete Pile Co.

New York: 140 Cedar Street
Chicago: 111 West Monroe Street
Montreal, Canada:
Raymond Concrete Pile Company, Ltd.

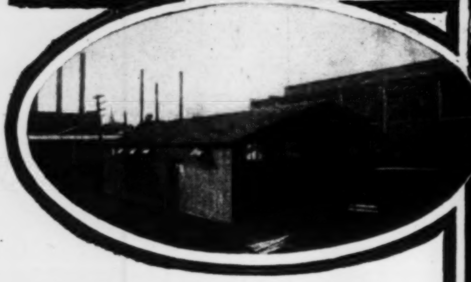
A Form for Every Pile—A Pile for Every Purpose



Top Photo:
Truscon Standard Building
50 feet x 210 [illegible]

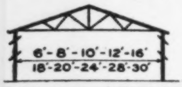
In Oval:
Truscon Standard Building at plant of T[illegible] Edison, Inc., Orange, N. J.

Bottom Photo:
Air tool shop American International Shipbuilding Corp., Hog Island, Pa.

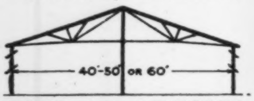


WIDTHS OF TRUSCON STANDARD BUILDINGS

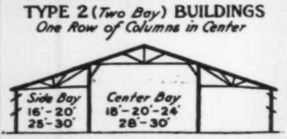
Any Length of Building varying by 2 ft.
Wall Heights, curb to eave, 7'-10" or 11'-6"



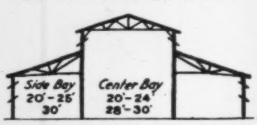
TYPE 1 (*Clear Span*) BUILDINGS



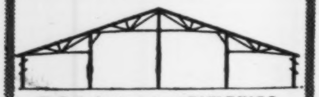
TYPE 2 (*Two Bay*) BUILDINGS
One Row of Columns in Center



TYPE 3 (*Three Bay*) BUILDINGS
Two Rows of Columns in Interior
Widths - 50' 52'-56'-58'-60'-64'
68-70'-74'-78'-80'-84'-90'



TYPE 3M (*Monitor*) BUILDINGS
Widths - 60'-64'-68'-70'-74'
80'-84'-90'



TYPE 4 (*Four Bay*) BUILDINGS
Three Rows of Columns in Interior
Widths - 80' (*4 Bays @ 20'*)
100' (*4 Bays @ 25'*)

CONTINUOUS MONITOR 12'-0" WIDE CAN BE PROVIDED AT RIDGE OF ANY BUILDING

For a Good Building Quickly —Get Our Estimates

LEADING industries are using Truscon Standard Buildings for a large variety of purposes. The Hooker Electro-Chemical Company of Niagara Falls, N. Y., say: "Have used Truscon Buildings as repair shop, office, stores, laboratory, paint shop, locker room and fire hall. We consider this type very satisfactory." United States Coal and Coke Company have pump, compressor and fan houses and pump stations; other industries have factory and storage buildings of all kinds, also dining halls, garages, hospitals, etc. Manufacturers, like Packard Motor Car Co., Ford Motor Co., American Car & Foundry Co., U. S. Aluminum Co., and American Can Co., have given repeat orders for Truscon Standard Buildings.

For that building you are planning get our estimates and free suggestions. Learn what we have done for other prominent companies. Truscon Standard Buildings will satisfy all your requirements for a fireproof, permanent building that can be speedily erected with maximum economy.

Truscon Standard Buildings meet a wide variety of requirements because of their flexibility in regard to shape and size. As they are built from interchangeable steel panels you can readily have them enlarged, rearranged and re-erected in new location.

As panels are carried in warehouse stock ready for immediate shipment, you are assured prompt service in getting a new building ready for erection or additional stock units for enlarging or rearranging buildings which you have in use.

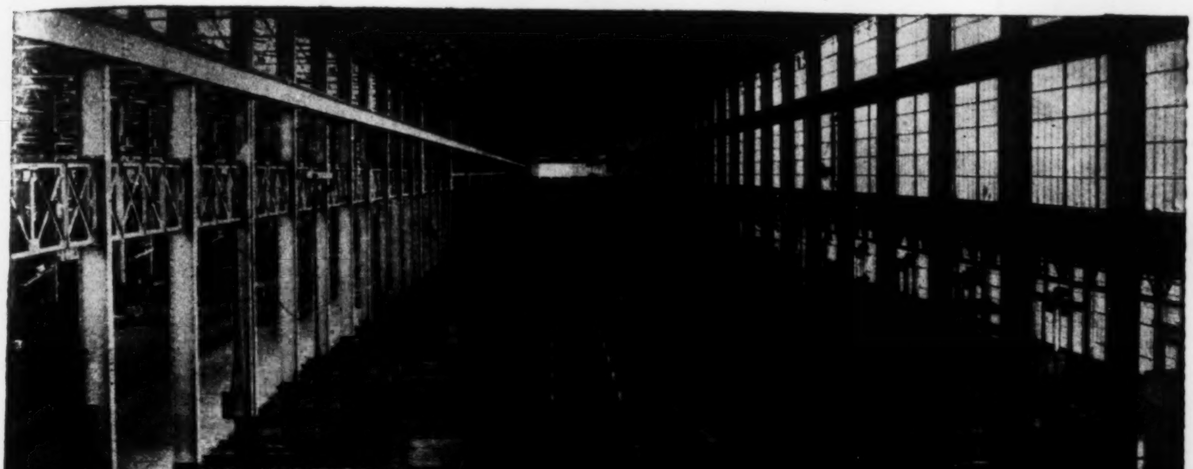
Tell us about the building you need—its approximate size and purpose. Use coupon below if convenient.

TRUSCON STEEL COMPANY
(FORMERLY TRUSSED CONCRETE STEEL CO.)
YOUNGSTOWN, OHIO.
WAREHOUSES AND REPRESENTATIVES IN PRINCIPAL CITIES
Reinforcing Steel, Metal Lath, Steel Windows, Steel Buildings, Pressed Steel, Cement Tile, etc.

TRUSCON
STANDARD BUILDINGS

TRUSCON STEEL CO.

TRUSCON STEEL CO., Youngstown, Ohio
Send catalog and information on type........................Truscon Standard Building
........ft. long........ft. wide........ft. high, to be used for..........................
Name.. Address.................................E. N.-R



Bright as day, the interior of the erection building of Ford shipbuilding plant, 250 feet wide.

The first Eagle leaves the building.

The Eagle passes from "daylight to day light."

From Daylight to Daylight

EXTENDING 1,700 feet in length and 250 feet in width, the erection building of the great Ford shipbuilding plant for constructing Eagle submarine chasers, has four acres of Truscon Steel Windows. When an Eagle was conveyed outside the plant, ready for launching, the daylight there was scarcely brighter than that inside the plant coming as it did through the great expanse of windows.

In other industries, no less than in shipbuilding, the well-lighted workroom is a prime asset. It insures greater accuracy, less waste, fewer accidents, and better health. Increased output, better products and economy in lighting bills are additional benefits. Truscon Steel Windows, characterized by trim, clean-cut lines and flat surfaces, represent the highest quality in design, construction, workmanship and hardware. Stock units, in thirty different types and sixty sizes, meet practically all requirements as regards size of window openings and ventilation. Their specification obviates delay and insures satisfaction.

Copy of handsome Truscon Steel Window Book mailed free on request. Use coupon if convenient.

TRUSCON STEEL WINDOWS

Truscon Steel Co.
Youngstown, Ohio
Warehouses and Sales Offices in Principal Cities

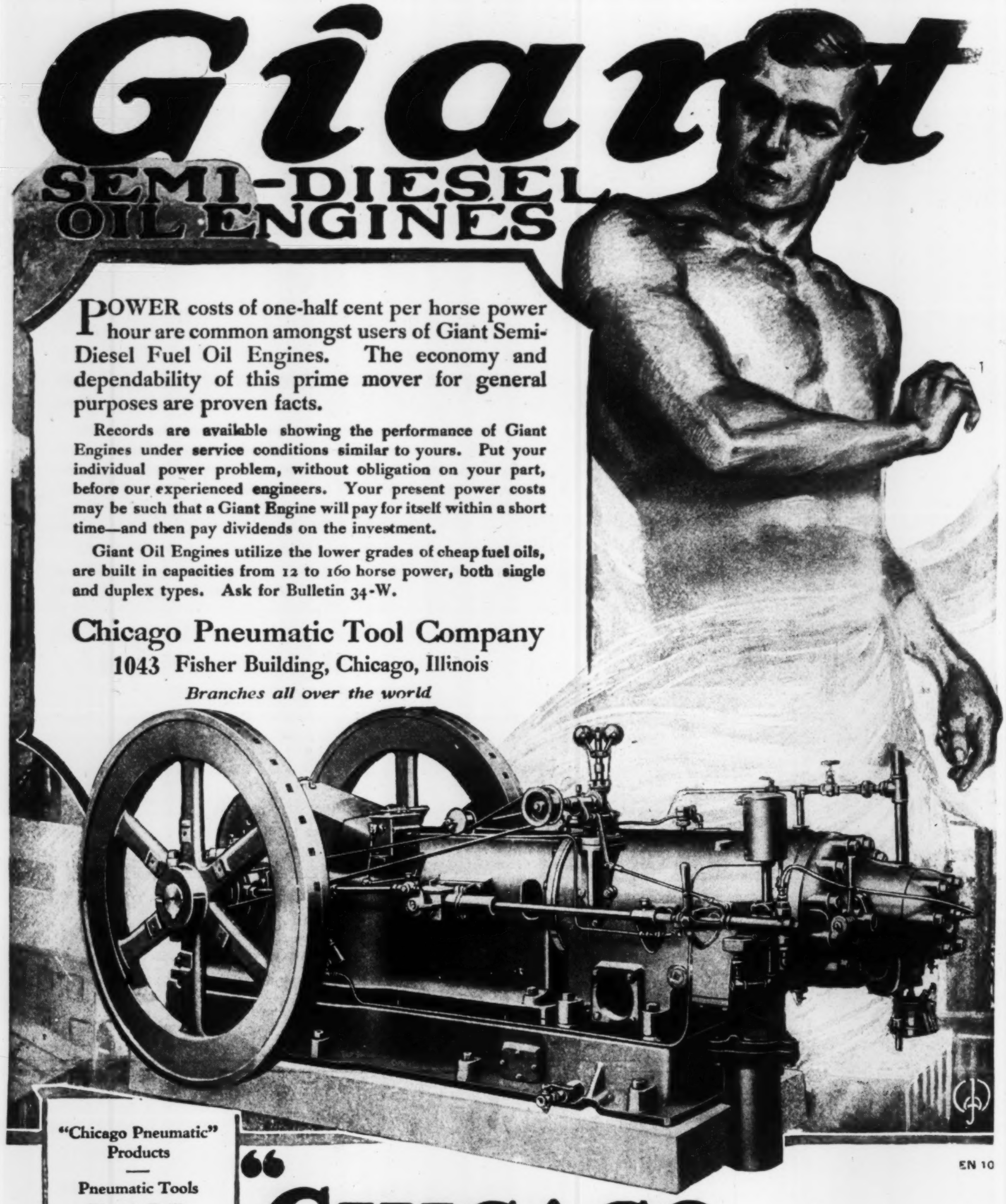
TRUSCON BUILDING PRODUCTS

Erection building of Ford Eagle Plant, 1700 ft. long, 250 ft. wide. Four acres of Truscon Steel Windows. Albert Kahn, Archt.

E. N.-R.

Truscon Steel Company
Youngstown, Ohio

Send Truscon Window Book and suggestions for building....x..
x..........to be used for..........
Name ....
Address ....



Giant

SEMI-DIESEL OIL ENGINES

POWER costs of one-half cent per horse power hour are common amongst users of Giant Semi-Diesel Fuel Oil Engines. The economy and dependability of this prime mover for general purposes are proven facts.

Records are available showing the performance of Giant Engines under service conditions similar to yours. Put your individual power problem, without obligation on your part, before our experienced engineers. Your present power costs may be such that a Giant Engine will pay for itself within a short time—and then pay dividends on the investment.

Giant Oil Engines utilize the lower grades of cheap fuel oils, are built in capacities from 12 to 160 horse power, both single and duplex types. Ask for Bulletin 34-W.

Chicago Pneumatic Tool Company
1043 Fisher Building, Chicago, Illinois
Branches all over the world

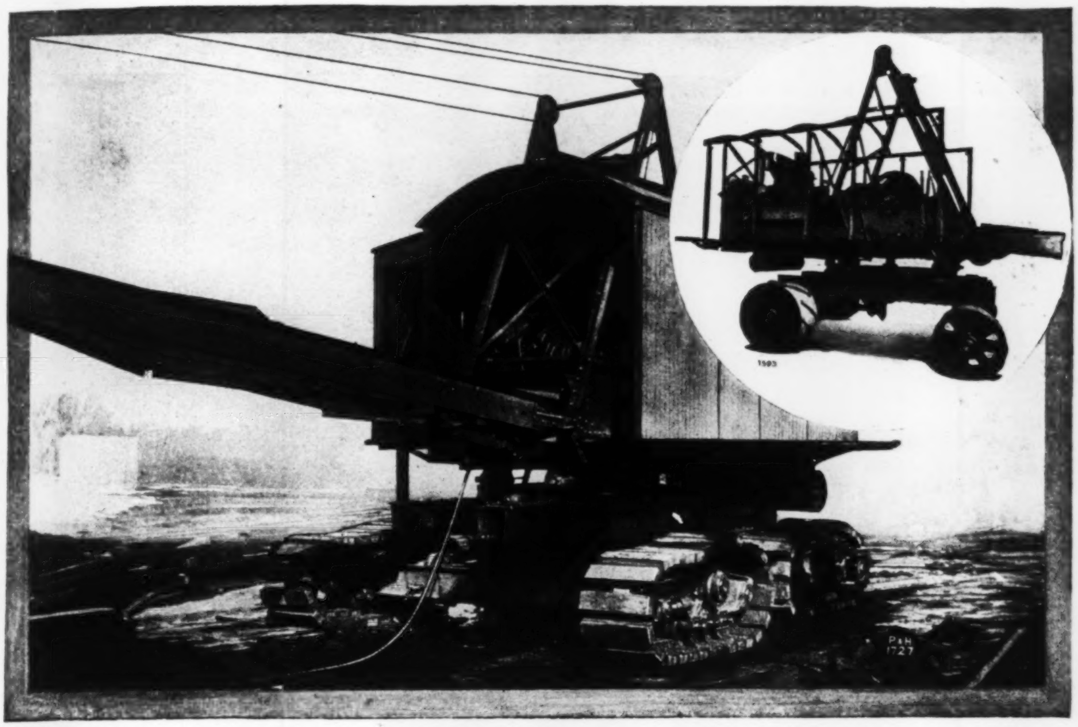
EN 10

"Chicago Pneumatic" Products

- Pneumatic Tools
- Electric Drills
- Air Compressors
- Oil, Gas and Steam Engines
- Vacuum Pumps
- Rock Drills

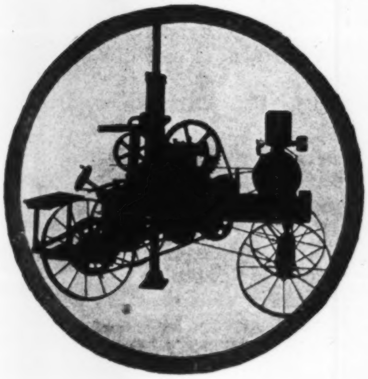
"CHICAGO PNEUMATIC"

Depend upon that name



"Built Like a Bridge"

THE entire mechanism is sustained on two heavy girders which in turn are supported on axles of I-beam construction and sturdy steel corduroys. A solid frame distributes the strain of operation evenly over the machine. These two facts are enough to convince you of the rugged construction of Dragline P & H Excavators, if you know machinery a bit.



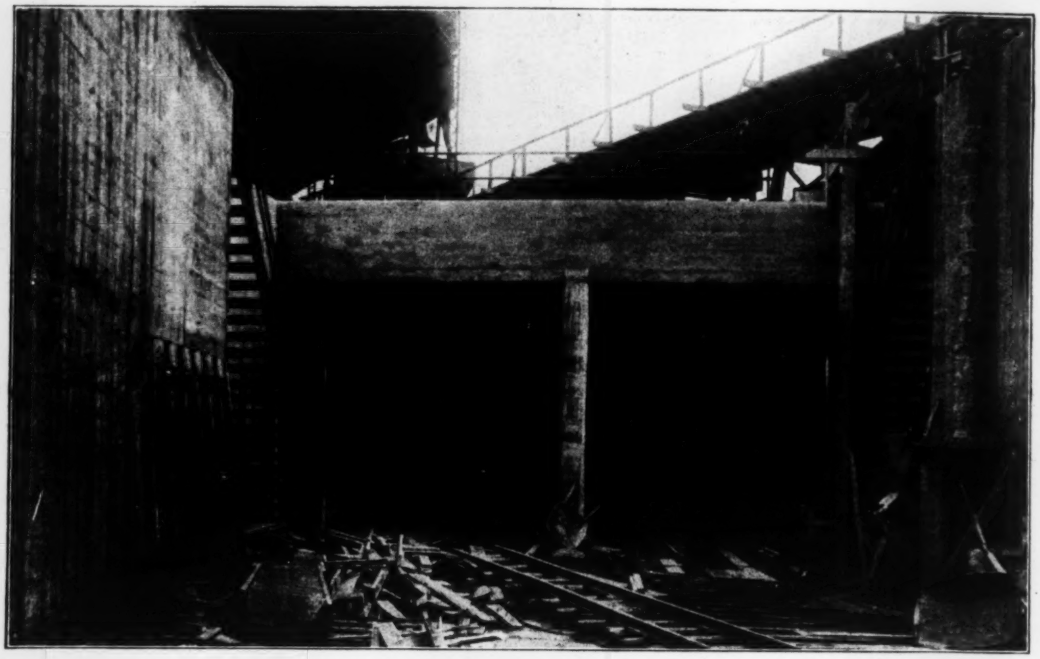
The P & H Power Traction Tamper strikes 42 blows per minute with a 150 lb. tamping head or ram, covering an area of 9 x 12 inches at one blow; it will thoroly tamp and compact 6 ft. of trench backfill per minute. Compare this with the efforts of your huskiest laborer. Cheaper, faster, more dependable in results than hand tamping; is that worth anything to you? Ask for Bulletin 8C—the P & H Power Tamper.

Even such a simple, commonplace affair as the engine house on this machine is built to a quality standard. It consists of angle iron framing incased in double beaded and matched yellow pine. Elaborate? Yes, but this housing must not only withstand the racking of dragline operations, but also protect the machinery against the wear and tear of the elements.

It is attention to little points of construction together with correct design and the use of good material thruout that puts P & H Excavators into the better class of contractor's machinery. Bulletin on the Draglines?

PAWLING & HARNISCHFEGER CO.
MILWAUKEE, WISCONSIN

P&H —excavators,— backfillers, tampers.



Switching Tunnel, Inland Steel Co., Indiana Harbor, Ind. Medusa Waterproofing in the Concrete

Watertight Under Heavy Water Pressure

The tunnel shown above connects Plants No. 1 and No. 2 of the Inland Steel Co., and carries an average water head of from 12 to as high as 16 feet.

The engineers in charge of construction took no chances on waterproofing materials. They used Medusa Waterproofiing, the original *integral* waterproofing for all cement and concrete work. The result is that the entire 2214 feet of this tunnel are watertight.

The floors and sidewalks were finished with a mortar coat $\frac{1}{2}$-inch thick, consisting of two parts sand and one part Medusa Waterproofed Cement. Medusa Waterproofing was also used in connecting the steel girders in the covered sections.

Medusa Waterproofing is the ideal waterproofing for all stucco, cement and concrete work. It comes in powder or paste form ready for use with any gray or white cement. It is mixed with the sand, cement and gravel and covers every granule and every pore with a water repellent film. Water cannot enter; dampness or ugly stains are impossible. No mere surface coating can equal Medusa Waterproofing. Always specify Medusa

MEDUSA
WATERPROOFING
PATENTED

"How to Make Concrete Waterproof" should be found in the library of every engineer. Copy will be sent you upon request.

The Sandusky Cement Company

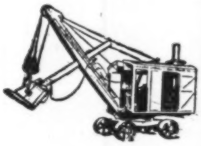
Department B, Cleveland, Ohio

Also Manufacturers of Medusa Gray and Medusa White Portland Cement — Plain and Waterproofed

MEDUSA WATERPROOFING

You will feel this way, too when you own an Erie!—

"We have worked our ERIE for three years in shale, loose rock, gumbo, and hard clay. In all of this time we have done very little shooting to aid the shovel, although we have often dug material that should have been shot.



"In spite of this hard service our ERIE is in good condition, and does its work just as well as ever.

"I have watched every make of steam-shovel, but I have never seen any other 20-ton machine that can dig in the material which our ERIE handles regularly.

"We believe that the ERIE has no equal on the market today."

Signed P. S. Hornor, ALLEN & HORNOR
General Contractors
Clarksburg, W. Va.

ERIE Shovel owned by
Allen & Hornor, Clarksburg, W. Va.

Compared with hand labor, any good steam-shovel will prove to be a money-saver.

But there is a lot of difference in shovels—a difference which may amount to as much as 30 or 40 per cent. of your profits.

Before you buy, investigate carefully. Get the facts. Pick the best steam-shovel.

We would like to send you a bulletin showing just what the ERIE can do. Write for a copy of Bulletin N. Address:

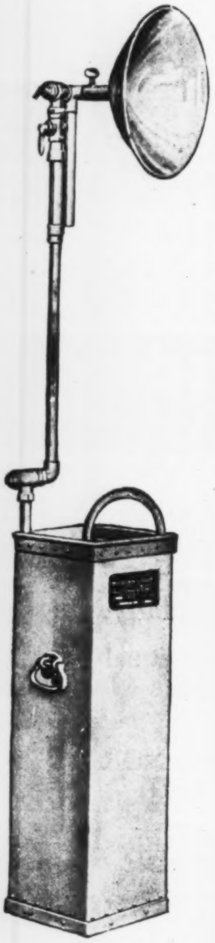
BALL ENGINE CO., Erie, Pa.

Builders of ERIE Steam-Shovels and Locomotive Cranes, ERIE Railway-Ditchers; BALL Engines.

ERIE Revolving Shovels

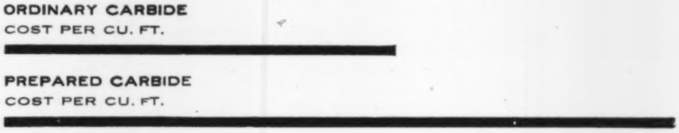
BALL Engine Co. Erie, Pa.

MILBURN Lights Are Standard



The construction of MILBURN acetylene lights enables them to extract the maximum illumination from ordinary lump carbide—the cheapest form in which carbide is sold.

It costs you 73% more to use specially prepared carbide than if you use the ordinary kind, which is sold the world over. In the first place, prepared carbide sells for nearly 40% more than ordinary carbide, and besides it is not nearly as efficient. A pound of the expensive kind actually generates much less gas than the ordinary kind used in MILBURN light. Here is the story:



The operation of the MILBURN light is simplicity itself. Just fill the pockets—it can't be overcharged. After a day's use simply dump the used carbide and recharge. You don't have to bother to throw out the water or clean the tank. The most inexperienced workman can't go wrong on a MILBURN light.

Write for booklet No. 21 or send for the complete catalogue.

We also manufacture complete welding equipment—everything from a torch to the largest generators and compressors. Booklet No. 31 describes oxy-acetylene apparatus.

THE ALEXANDER MILBURN COMPANY - BALTIMORE, MD

New York
51 E. 42d St.

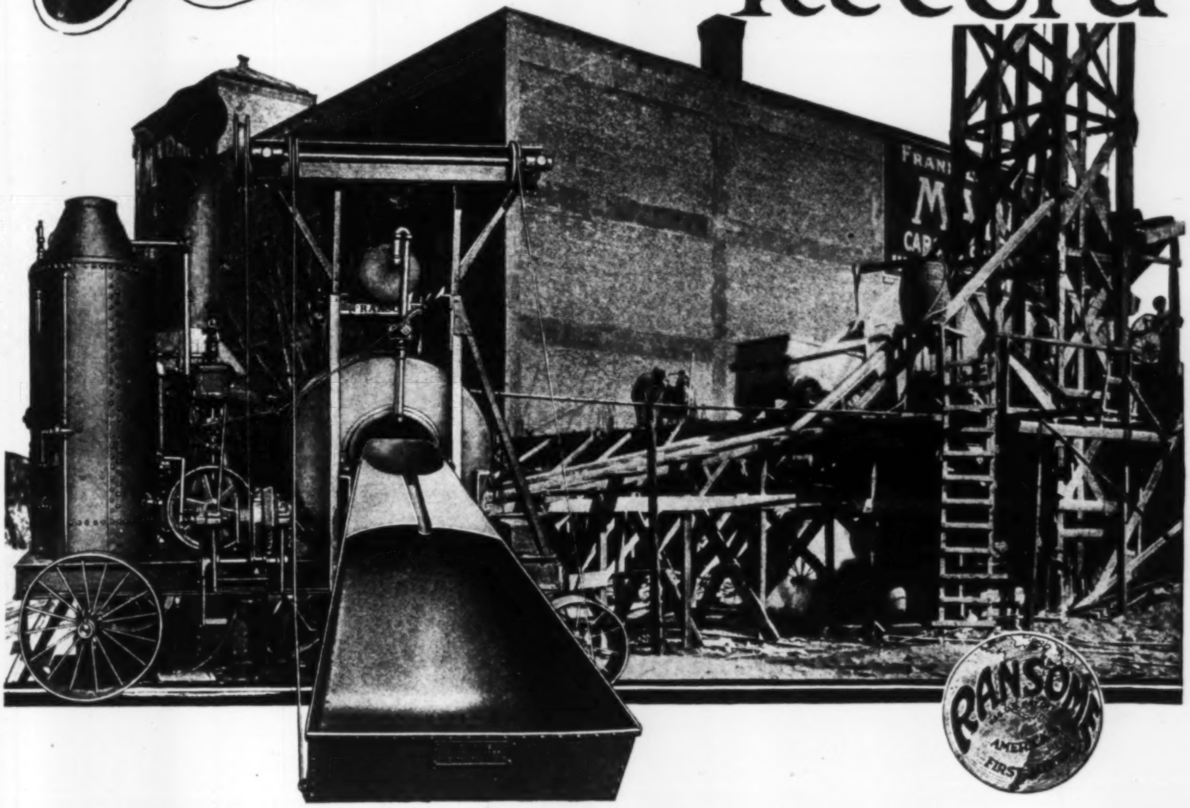
Chicago
1012 Kimball Bldg.

Pittsburgh
406 Bessemer Bldg.

San Francisco
1037 Monadnock Bldg.

Agencies throughout the United States and Canada

Making a Ransome Record



41,000 Cubic Yards and Not a Cent for Repairs

That's the record of one Ransome 28-S Standard Mixer, and when last reported, the mixer was still at work. Incidentally, that particular mixer discharges 30 cubic feet of concrete in about twelve seconds.

Another Ransome Mixer—a 7-E High Drum Paver, put down 470 square yards of 6-inch concrete in eight and a half hours, with an unskilled crew and the total repairs for 50,000 square yards was only one-tenth of a cent per square yard.

That's the sort of thing that explains the preference of contractors for Ransome Equipment.

Write for Bulletin 200 on Ransome Standard Mixers.

RANSOME CONCRETE MACHINERY CO.

Main Office and Works: 1750 Second Street, Dunellen, N. J.

Branch Offices: Boston, New York, Chicago, San Francisco, Philadelphia, Pittsburgh, Detroit
Canadian Representatives: F. H. Hopkins & Co., Montreal and Toronto
Agencies in all Principal Cities
Manufacturers of mixers, pavers, pneumatic mixers, chuting plants, hoist buckets, bins, cars, carts, etc. 31-82

Which Way
Mr. Waterworks Man
W & T
INC

The Responsibility is YOURS!

ONE WAY lies the ever potential danger of TYPHOID FEVER and similar water-borne diseases, through a polluted Water Supply

THE *OTHER* way—*the right way,* means complete protection by efficient sterilization to you, your family, your friends, your entire community.

There is but one way

to be sure that any water is safe—STERILIZE IT—
by Liquid Chlorine and

"W & T" Equipment

THE STANDARD CHLORINATOR

The water supplies of New York, London, Paris, and hundreds of other cities and towns, large and small, throughout the world are equipped with this apparatus, treating upwards of Three Billions of gallons daily.

The Cost? But 17 cents to 50 cents per million gallons.

Which Way, Mr. Waterworks Man?

WALLACE & TIERNAN CO., Inc.
349 Broadway New York
Peoples Gas Building, Chicago, Ill.

Canadian Representatives
The General Supply Co., of Canada, Ltd.
Ottawa, Montreal, Toronto, Winnipeg, Vancouver

Pacific Coast Representative
Kenneth Shibley, Merchants Exchange Building
San Francisco, Cal.

Southwestern Representative: David Morey, Jr., 507 Scollard Building, Dallas, Texas

INTAKE CRIB, BUFFALO PUMPING STATION.
NEW PUMPING STATION CITY OF BUFFALO, N.Y.

BUFFALO appreciates the quality of E. B. G. Liquid Chlorine, and E. B. G. Service.

Used exclusively since 1914

Typhoid Death Rate
of Buffalo

Before **Chlorination**
1910-1914—Average 17.4
per 100,000

After Chlorination
1915-1918—9.5 per 100,000

ELECTRO BLEACHING GAS COMPANY

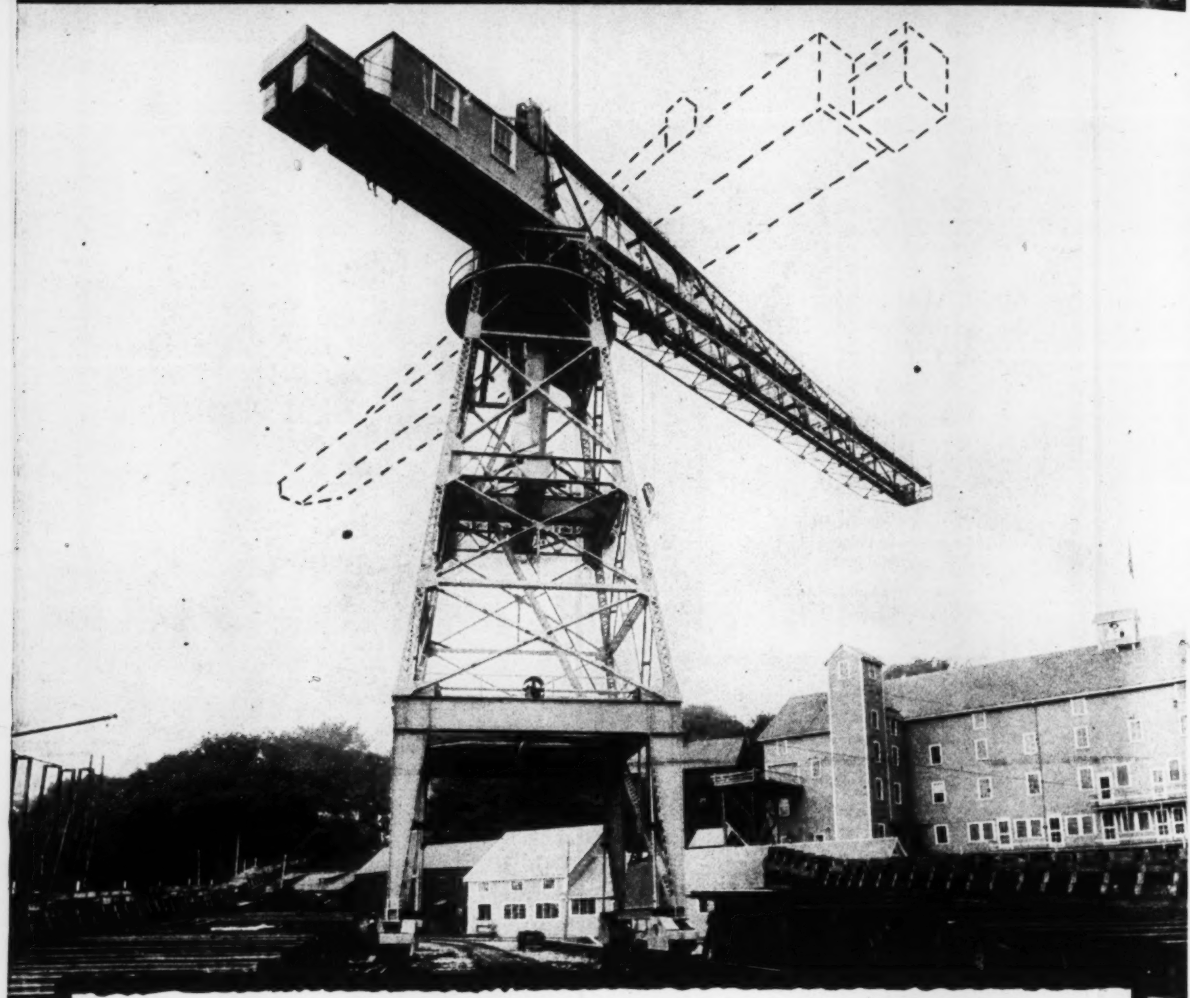
Pioneers and Leading Manufacturers of Liquid Chlorine

MAIN OFFICE: 18 EAST FORTY-FIRST STREET NEW YORK CITY

Plant: Niagara Falls, N. Y. **Chicago Office: 11 La Salle Street**

Liquid EBG Chlorine

LOCOMOTIVE CRANES
CLAM SHELL BUCKETS - SHIPBUILDING CRANES
CAR DUMPERS PILE DRIVERS
THE McMYLER INTERSTATE Co.
CLEVELAND OHIO



This Traveling Hammerhead Serves Two Ways

Two Shipbuilding Ways are covered by the swing of this crane, originated at Crane Headquarters. Capacity 10 tons at 50-ft. radius. But the principal point is this—it took vision, solid engineering skill and adequate shop facilities to build this crane. This is what makes McMyler Interstate of such value to men who want efficient handling equipment. Realize this, that you have in this organization a means of securing the crane you want. We build cranes varying in size from the smallest to the largest with equal success. Better get in touch with us now.

THE McMYLER INTERSTATE CO.

Chicago *Crane Headquarters* **Cleveland, Ohio** **New York** S.C.2

MICHIGAN PIPE

Laid Before the Eyes of Michigan Experts

There's no lost motion, time consumed building elaborate tackle where Michigan Pipe is laid. A water pipe expert from our own field staff is available to oversee the job from the unloading to the filling in. Common labor and this man lay Michigan Pipe perfectly and rapidly (2500 feet of 6-inch pipe is often laid in 5 hours). Compare this with ordinary water main construction costs.

If you are interested in the reason why far-sighted municipal engineers choose "Michigan" Pipe for permanent construction, it is found in the fact that this pipe is corrosion-proof, remains free from incrustations and algæ, preserves purity of water, has some 20 per cent. greater carrying capacity and only nominal maintenance cost. Let us send you the names of some municipalities using "Michigan."

Write for the "Michigan Pipe Book."

"Perfection Points"

Low Cost of Laying
Low Initial Cost
Durability—40 years' record
We Help to Lay it
Frost-proof
Corrosion-proof
Laid in a Wet Trench
Low Repair Costs
Enduring Strength
Service Connections Easily Made
Preserves Purity of Water
Light-weight (easily handled)
No Electrolysis
Greater Carrying Capacity
Nominal Maintenance Costs
Laid by Common Labor
Made by a firm with 40 years' experience

The Michigan Pipe Co., 17 North Madison Ave., Bay City, Mich.

New York City, N. Y......30 E. 42nd St.
Oklahoma City, Okla.....14 N. Dewey St.
Chicago, Ill.....Insurance Exchange Bldg.
Boston, Mass..............93 Broad St.
Cleveland, Ohio..........919 American Trust Bldg.
Chattanooga, Tenn...319 Hamilton Nat'l Bank Bldg.
Montreal, Ont., Canada..........................204 St. James St.

"Steel for Strength—Wood for Durability"

OSGOOD 18

Reaches Far Out of the Pit

THIS picture shows an OSGOOD "18"—¾-yd. Revolving Steam Shovel, owned by Mr. Harry M. Saxbe, Urbana, Ohio, operating in a gravel pit. Note particularly that the long reach of the OSGOOD "18" enables the operator to swing the dipper far above the top of the wagon bed. Another interesting feature about this shovel is the remarkable yardage record which it established at Camp Knox.

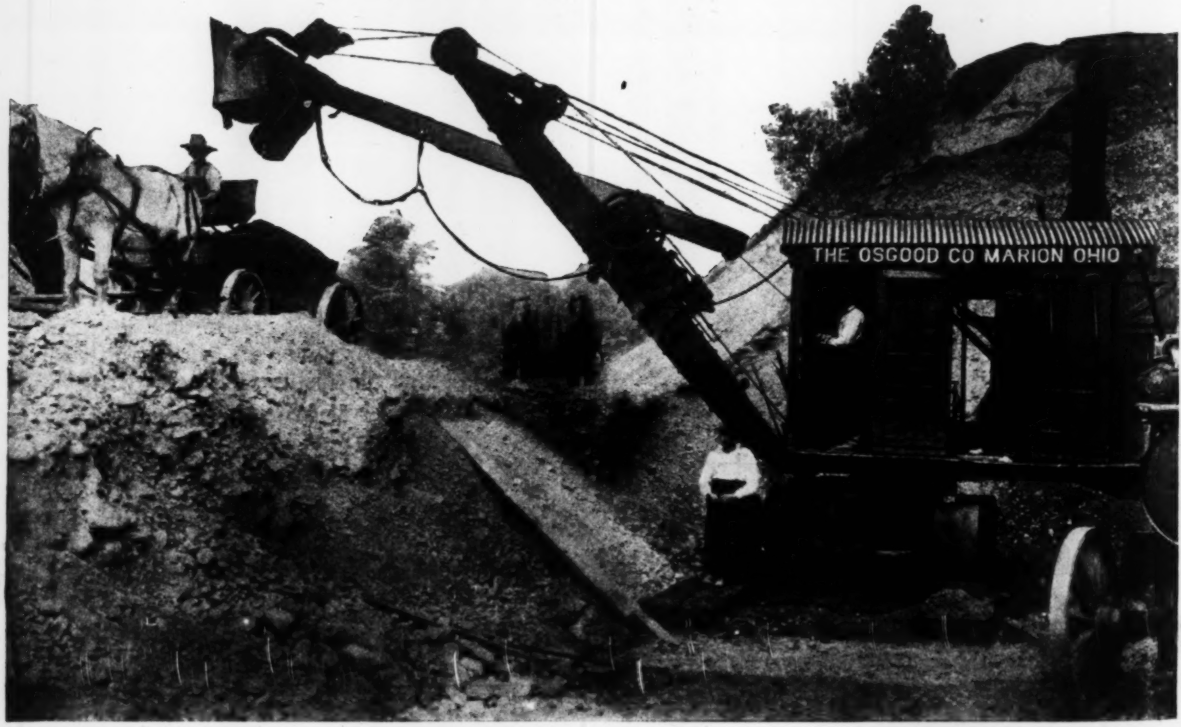
The OSGOOD "18" is a compact, powerful shovel that is adapted perfectly to Road Grading, Cellar and Sewer Excavations, Ditching, Dredging, Quarry Work, etc.

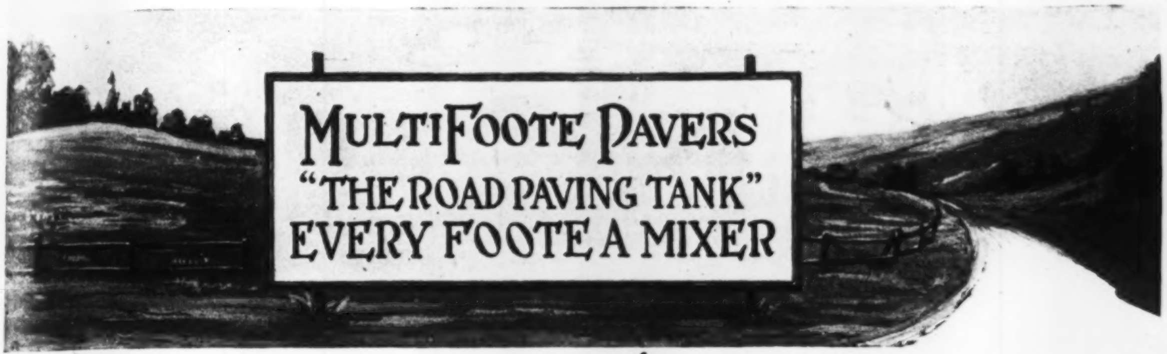
Write TODAY for information on OSGOOD "18".

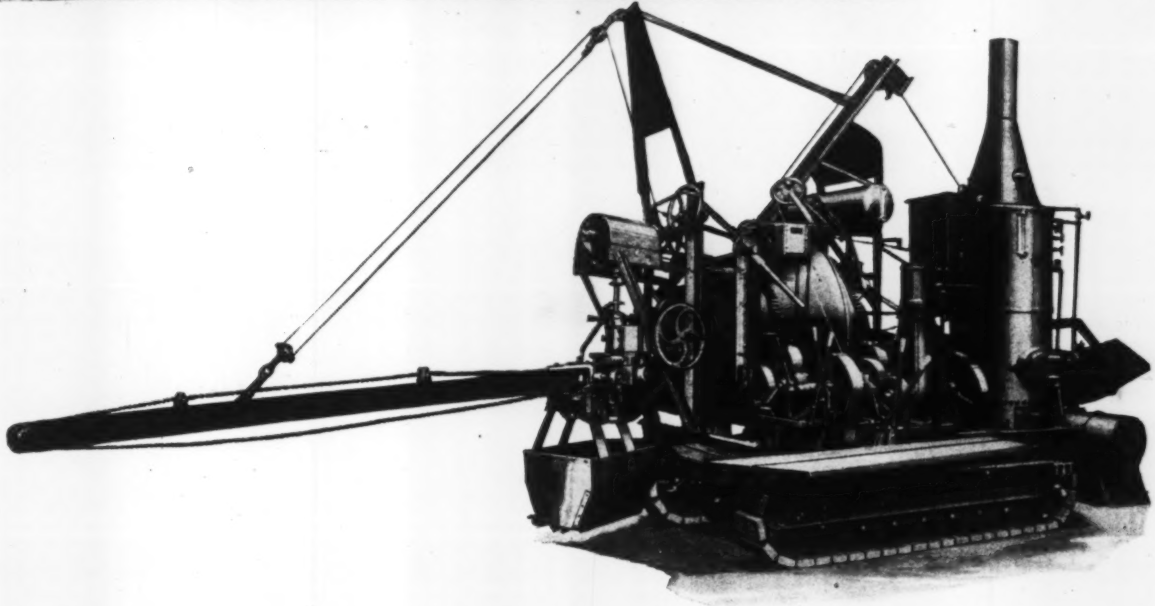
Ask for copy of our new General Catalog A-1.

Revolving and Railroad Types—¾ to 6 cu.yds.

The Osgood Company
Marion, Ohio







There Are Reasons Why 65% Of All Foote Sales Are Repeat Orders

I. Multifoote Traction

Multifoote traction eliminates traction troubles. Two speeds with reserve power.

II. Distribution

Either Boom and Bucket or Gravity Chute.

III. Power Equipment

Power equipment is the basis of all operation—that's why Foote's margin of safety calls for 50% reserve power.

IV. Foote Operation

From a large platform, one operator, out of the way of the gang, without moving away from his levers can see the loading, discharging and placing of the concrete. It prevents delays and means more yardage.

V. Foote Batchmeter

Insures uniform mix for every batch, locks and unlocks the discharge chute and it counts the number of batches.

VI. Foote Automatic Water Tank

Automatic measuring syphon type (no floating valves), quick, positive accurate.

VII. Foote Reputation

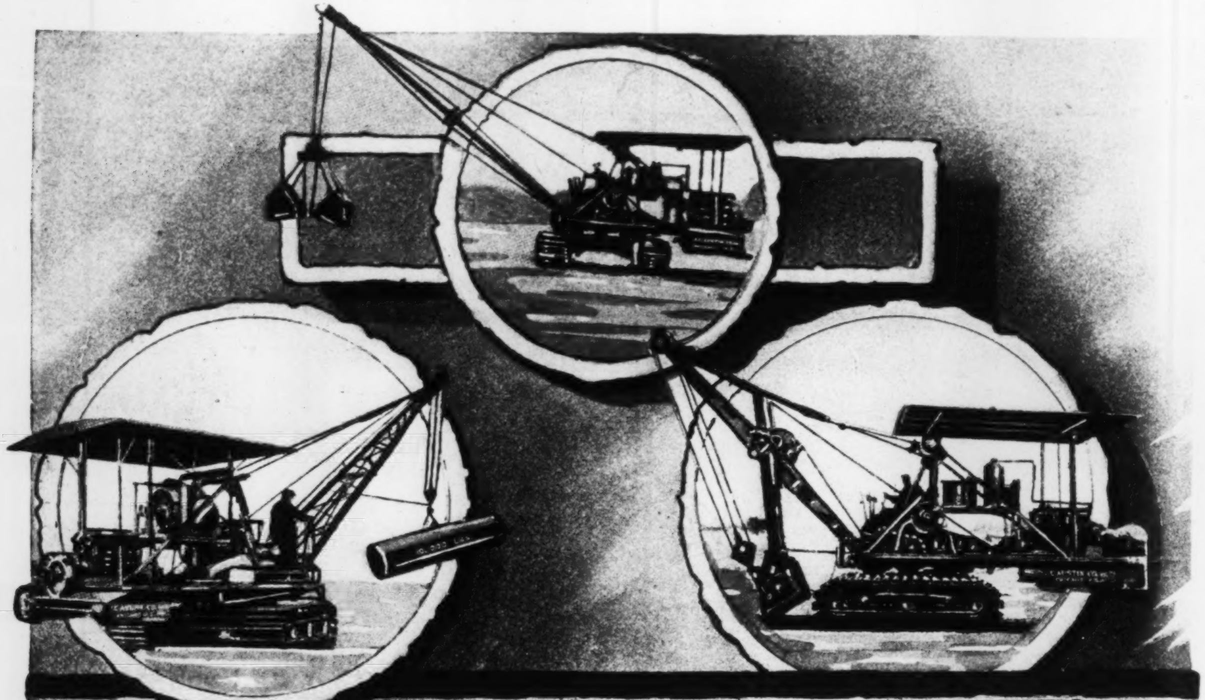
Twenty years of continued interest and study on thousands of Foote Pavers, after they were sold, has been the Foote policy. This policy has made the Foote a paver "without frills, built solely for service."

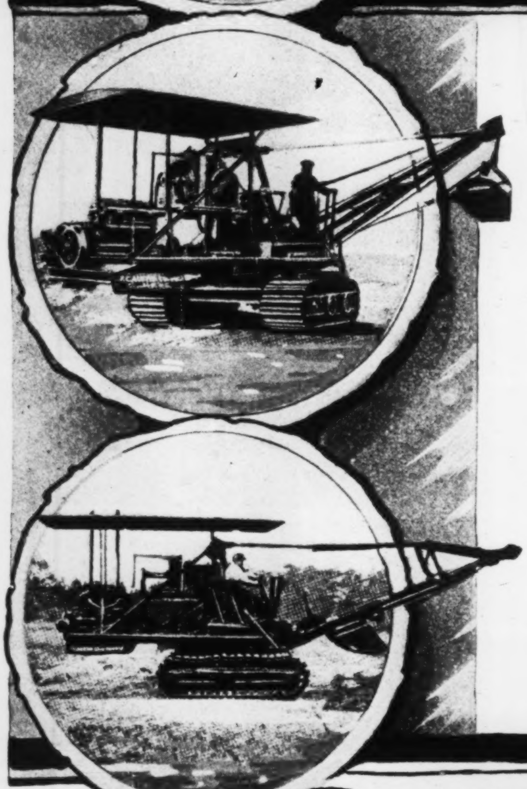
General Agents

Foote Concrete Machinery Co.	1322 So. Michigan Ave., Chicago, Ill.
Wilcox Bros.	26 Roosevelt Ave., Binghamton, N. Y.
E. J. McHarg & Co.	3 Crandall St., Binghamton, N. Y.
Edward R. Bacon Co.	51 Minna St., San Francisco, Calif.

Made by The Foote Co., Inc., Nunda, N. Y.

MULTIFOOTE PAVERS





An Ideal Combination Machine For Highway Construction Work

Plenty of Power and Strength—

At comparatively low initial outlay you may equip yourself for any road letting this year.

An Austin combination shovel—clamshell bucket, dragline, Crane-hoist—combines five machines into one.

It is operated by one man and will do economically and efficiently all the machine work on the job, preparatory to the concreting.

Use it first to unload all your equipment and materials. It does all your grading, ditching, backfilling and finishing. Use it to load your wagons or trucks, to place your pipe. Multipedal traction enables you to use it as a tractor in pulling your equipment over the subgrade without cutting it and to cross bridges without shoring.

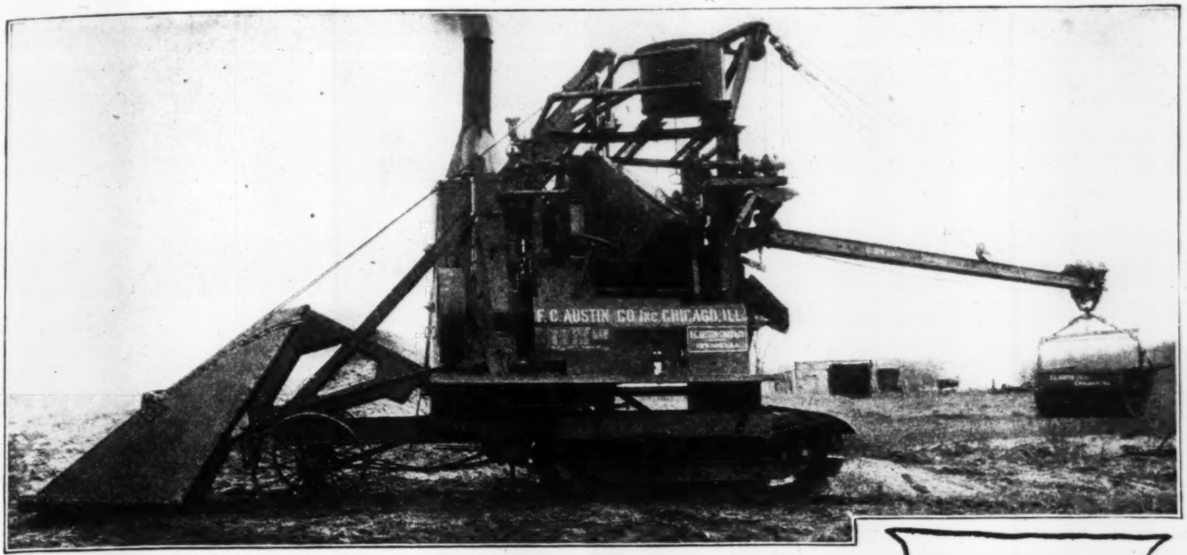
This Austin No. 5 machine is a good investment for the road contractor and it will pay you to investigate. Many of them are in service throughout the country.

Catalog D.L. 103.

MANUFACTURERS OF

Trenching Machines
Backfillers
Farm Tile Trenchers
Dragline Excavators
Dry Land Dipper Dredges
Levee Builders
Multipedal Tractors
Wheel Tractors
Wagon Loaders
Cube Concrete Mixers
Cube Pavers
Cube Hot Mixers
Asphalt Mixers
Drum Mixers
Drum Pavers
Motor Flushers and Sprinklers
Motor Sweepers and Sprinklers
Motor Road Oilers
Ditching Machines with Bank Sloping Attachments
Drainage Excavators

Austin Combination
Shovel Dragline-Clamshell Bucket-Crane



Cube Mixers Are Intensive Mixers

Austin Cube Mixers knead the batch—they do not stir or dip, or plow the concrete, they knead it. Scientists call this action incorporation under pressure. Note the idea of incorporation. The thought is not segregation which is a stirring, plowing action, it is incorporation which is a kneading action. Austin Cubes fold and refold and squeeze the batch repeatedly in each revolution—they knead. Kneading acts on the whole batch, not on a fraction of the batch as does stirring or plowing, hence it is a quick mixing action as well as an intensive mixing action.

THE PRACTICAL GAINS ARE:

(1) The same quality of concrete is produced in less time or a much superior concrete in the same time.

(2) If time is set as is the practice in road work a more mobile or workable mixture is produced, one that can be more easily spread and compacted.

(3) If quality is set, as is the practice in most construction, more batches of standard quality are turned out per hour or day.

Interlining Plates Make Cubes Everlasting

Send for Catalog No. 3

F. C. AUSTIN COMPANY, Inc.
Main Office: **Railway Exchange Bldg., Chicago**
New York Office: **30 Church Street**

Prominent Authority Explains Value of Intensive Mixing

Few students of concrete have a reputation for sound thought and conservative speaking which equals that generally accredited to Prof. A. N. Talbot of the University of Illinois.

In a recent discussion before the American Railway Engineering Association Professor Talbot said:

More thorough mixing not only mixes the paste and better coats the particles, but it makes the mass mobile with a smaller percentage of mixing water, and this less dilute paste results in higher strength. Any improvement in method of mixing which increases the mobility of the mass will permit the use of a less dilute paste and thereby secure increased strength.

Austin
Cube Pavers

BLAW BUCKETS
FABRICATED STEEL
TRANSMISSION TOWERS
FURNACE EQUIPMENT
BLAW MIXERS
PLATE
WORK

SPEED

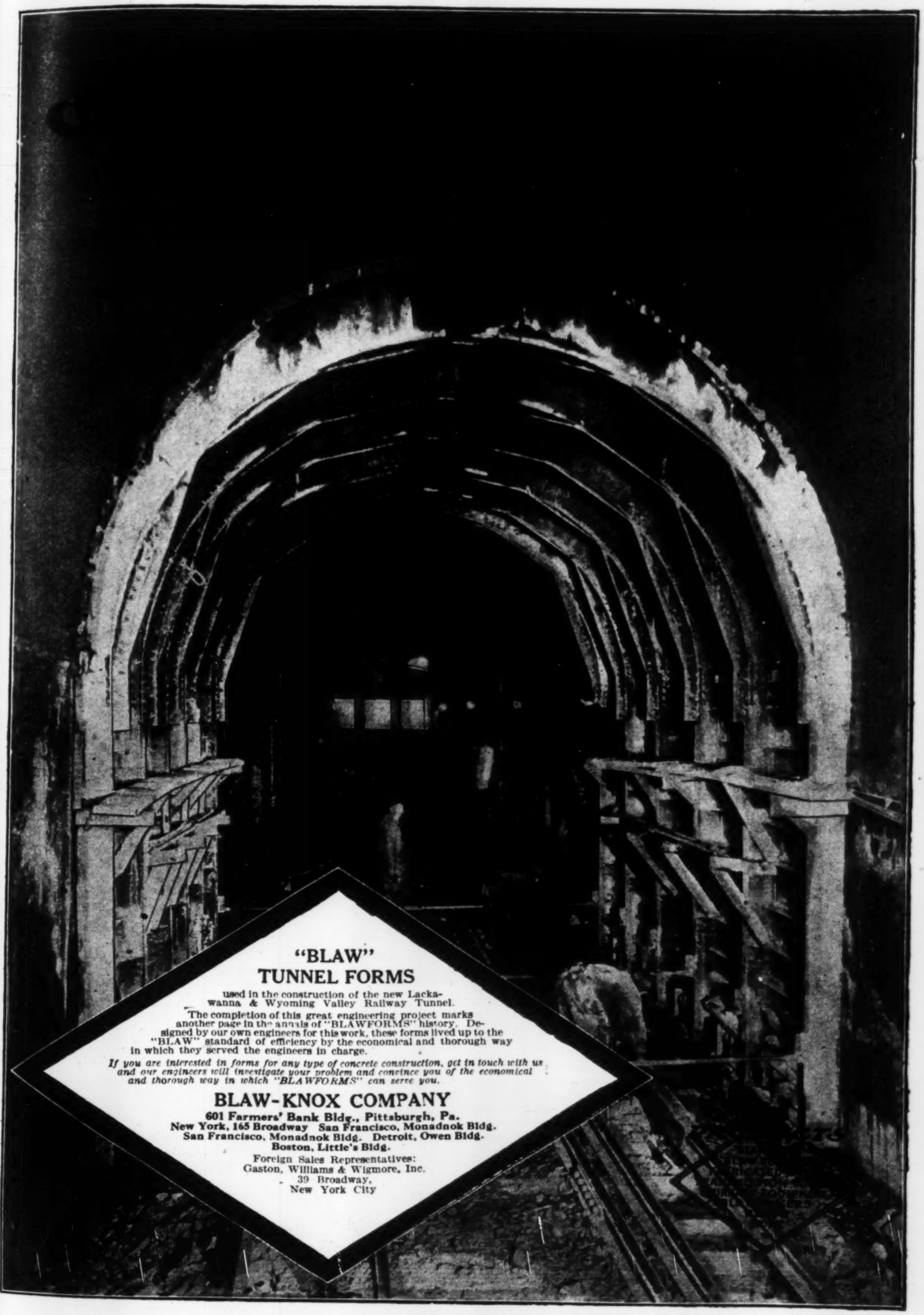
"Blaw" Speedster Buckets

Always live up to their name & rating.

Picking up an overload at every bite, coupled **with its speed** in operation, this 1½ cu. yd. "BLAW" SPEEDSTER is performing excellent service at the plant of the Northwestern Consolidated Milling Co., Minneapolis, Minn., where the fast rehandling of loose bulk materials is an essential factor.

Your plant would also benefit by the installation of a "BLAW" Bucket. Inform us of your requirements, and our engineers will solve your problems.

BLAW-KNOX COMPANY,
601 Farmers Bank Bldg., Pittsburgh, Pa.
New York, 165 Broadway
Chicago, Peoples Gas Bldg.
Boston, Little's Bldg.
Detroit, Owen Bldg.
San Francisco, Monadnock Bldg.
Foreign Sales Representatives:
Gaston, Williams & Wigmore, Inc.
39 Broadway
New York City



"BLAW" TUNNEL FORMS

used in the construction of the new Lackawanna & Wyoming Valley Railway Tunnel.

The completion of this great engineering project marks another page in the annals of "BLAWFORMS" history. Designed by our own engineers for this work, these forms lived up to the "BLAW" standard of efficiency by the economical and thorough way in which they served the engineers in charge.

If you are interested in forms for any type of concrete construction, get in touch with us and our engineers will investigate your problem and convince you of the economical and thorough way in which "BLAWFORMS" can serve you.

BLAW-KNOX COMPANY

601 Farmers' Bank Bldg., Pittsburgh, Pa.
New York, 165 Broadway San Francisco, Monadnok Bldg.
San Francisco, Monadnok Bldg. Detroit, Owen Bldg.
Boston, Little's Bldg.

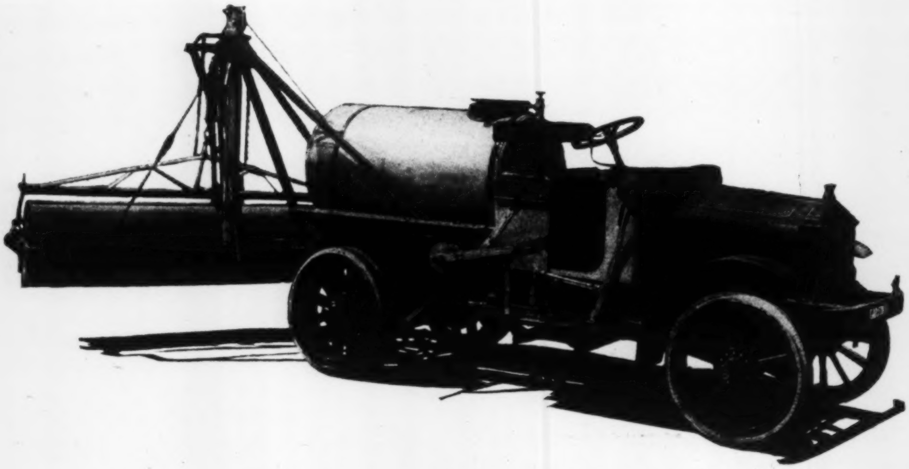
Foreign Sales Representatives:
Gaston, Williams & Wigmore, Inc.
39 Broadway,
New York City

Garford

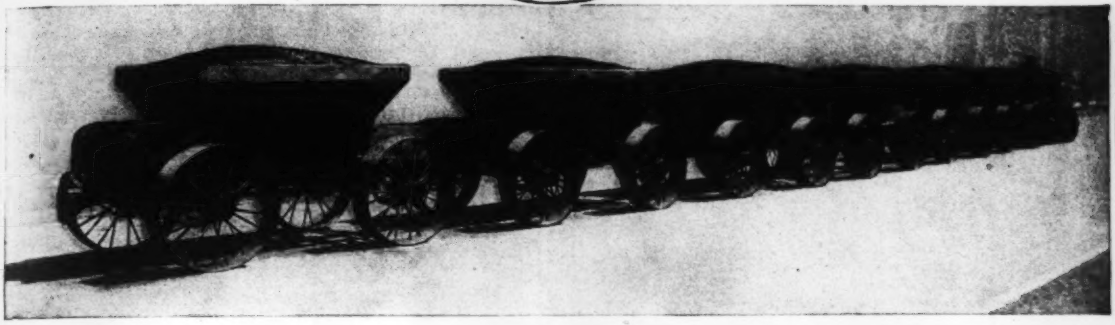
MOTOR
TRUCKS
FOR EVERY
PURPOSE

WHERE unfaltering, economical work must be done—Garford has won the confidence of thousands by giving dependable service *and low ton mile cost.*

"Users Know"



The Garford Motor Truck Company, Lima, Ohio
Motor Trucks of All Capacities
Distributors and Service Stations in all principal cities



A train of 6 slow-speed Troy Trailers ("reversible wagons") carrying road material and hauled at 4 miles per hour by a "Caterpillar" Tractor.

Troy Trailers PERFORM. They are dependable. They are always RIGHT THERE. The contractor KNOWS when he uses Troy Trailers to haul his material that his material will be there—not one load at a time, but SIX LOADS every trip,

Troy Trailers

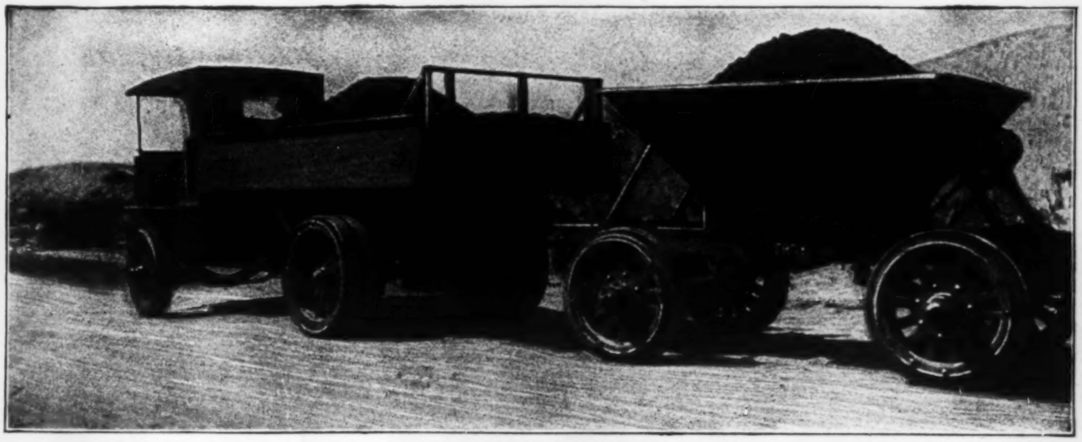
We are still building the famous old Troy Ajax, team-drawn, dump wagon.

are made in both slow-speed for use behind road engines and tractors (see above) and also high-speed for use behind motor trucks, as per illustration below.

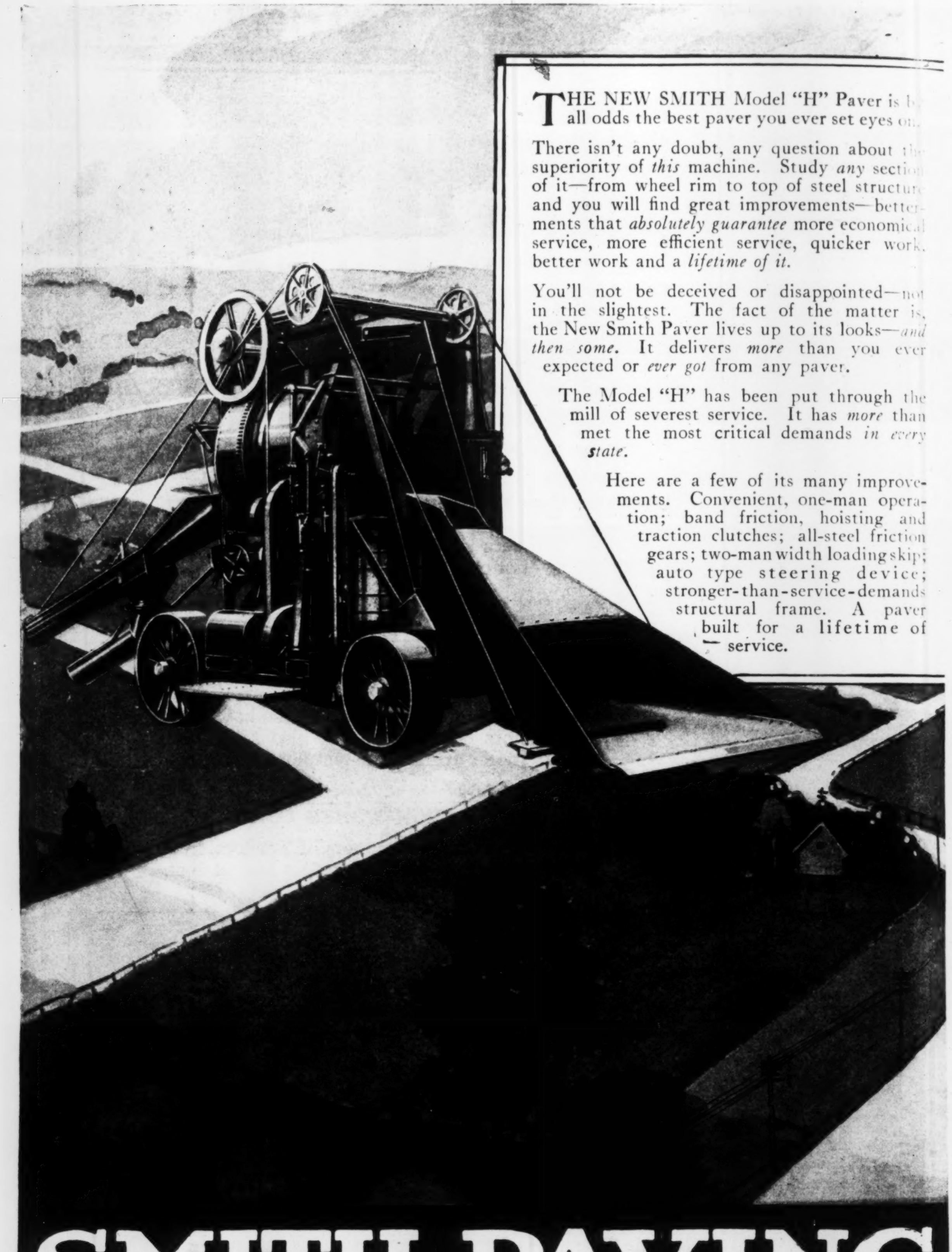
Send for folder of "Some Users" of Troy Trailers

THE TROY WAGON WORKS COMPANY, Troy, Ohio

Oldest and largest makers of Trailers, making possible highest grade construction at lowest cost.



Troy Trailers working for the O. & C. Construction Company. They could not be convinced that trucks would pay until they made a trial with trucks and trailers; they now have four TROYS.



THE NEW SMITH Model "H" Paver is b all odds the best paver you ever set eyes o

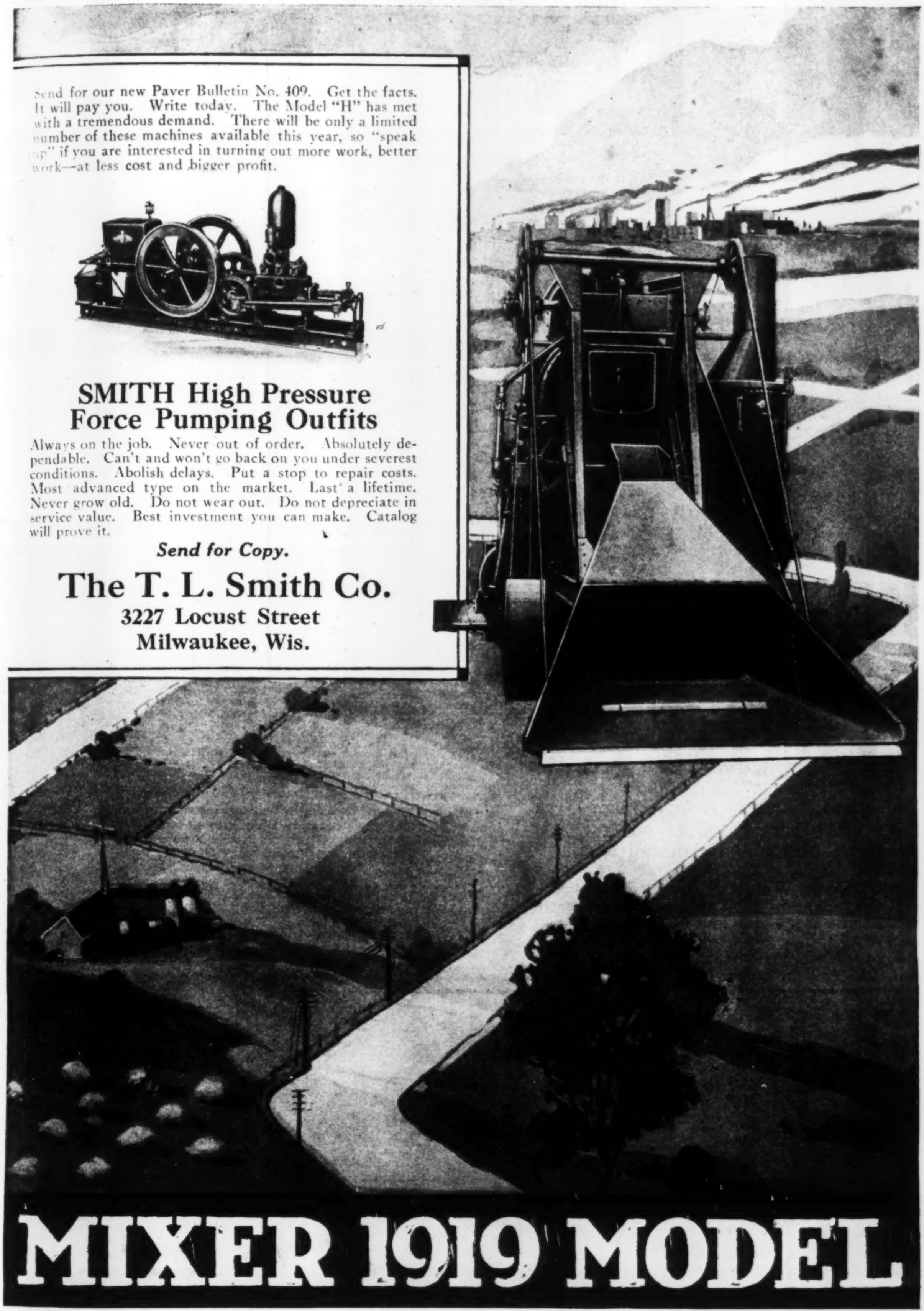
There isn't any doubt, any question about t superiority of *this* machine. Study *any* sectio of it—from wheel rim to top of steel structu and you will find great improvements—betterments that *absolutely guarantee* more economical service, more efficient service, quicker work, better work and a *lifetime of it.*

You'll not be deceived or disappointed—not in the slightest. The fact of the matter is, the New Smith Paver lives up to its looks—*and then some.* It delivers *more* than you ever expected or *ever got* from any paver.

The Model "H" has been put through the mill of severest service. It has *more* than met the most critical demands *in every state.*

Here are a few of its many improvements. Convenient, one-man operation; band friction, hoisting and traction clutches; all-steel friction gears; two-man width loading skip; auto type steering device; stronger-than-service-demands structural frame. A paver built for a lifetime of service.

SMITH PAVING



Send for our new Paver Bulletin No. 409. Get the facts. It will pay you. Write today. The Model "H" has met with a tremendous demand. There will be only a limited number of these machines available this year, so "speak up" if you are interested in turning out more work, better work—at less cost and bigger profit.

SMITH High Pressure Force Pumping Outfits

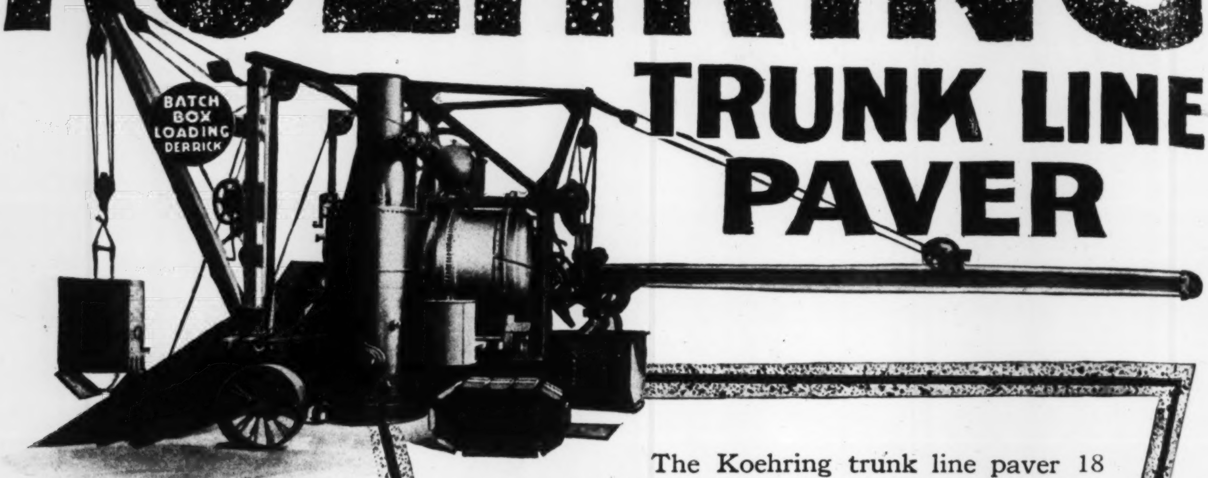
Always on the job. Never out of order. Absolutely dependable. Can't and won't go back on you under severest conditions. Abolish delays. Put a stop to repair costs. Most advanced type on the market. Last a lifetime. Never grow old. Do not wear out. Do not depreciate in service value. Best investment you can make. Catalog will prove it.

Send for Copy.

The T. L. Smith Co.
3227 Locust Street
Milwaukee, Wis.

KOEHRING

TRUNK LINE PAVER



The Koehring trunk line paver 18 cu. ft. wet batch rating, is the largest capacity machine that good judgment will put on highway work under average conditions. The Koehring book of Blue Prints will show you why

Underslung frame for boiler and engine, to keep the center of gravity low—a big feature of low maintenance in this big paver.

The fastest paving *unit*, because automatic features of operation, both of mixer and boom and bucket system, mean a big extra yardage. Loading derrick interchangeable to either side of mixer—optional on Koehring pavers.

Koehring capacities in cu. ft. wet batch rating

Pavers 12 cu.ft., 18 cu.ft., with or without loading crane to lift batch boxes from industrial cars or trucks.
8 cu. ft., without loading derrick.
Construction Mixers 7, 10, 14, 21, 28 cu.ft.
Hot Mixers for bituminous work, 9, 14 cu.ft. side charging type; 18 cu.ft. paver type.
Gasoline, steam and electric power.

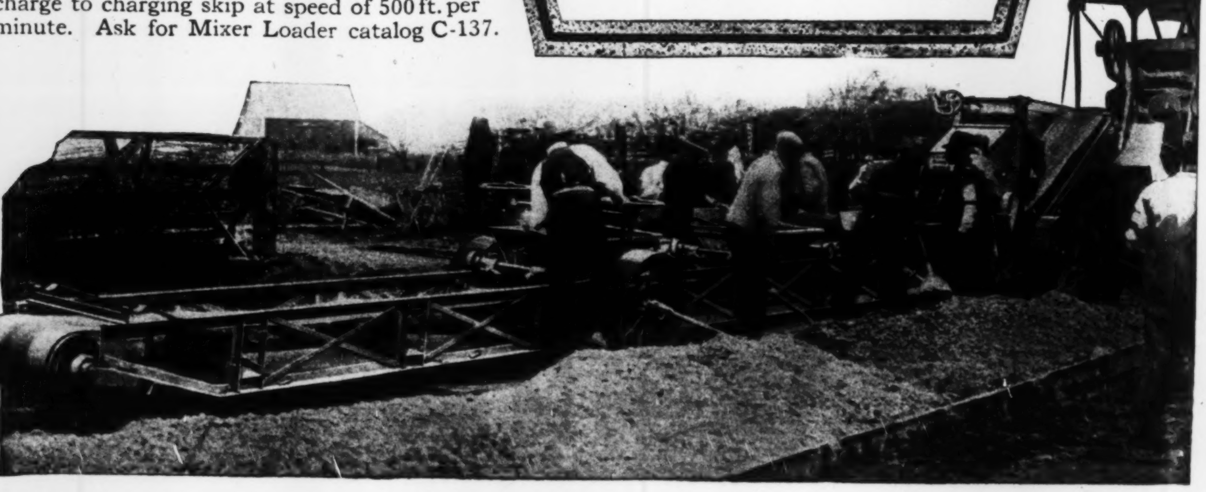
Save two-thirds of your haulage equipment— it can often be done by using two mixers instead of one. The Koehring Book of Blue Prints, each blue print 36 in. long, show you how—shows 9 ways of handling highway contracts. Glad to send it to you. Ask for Blue Print Book X.

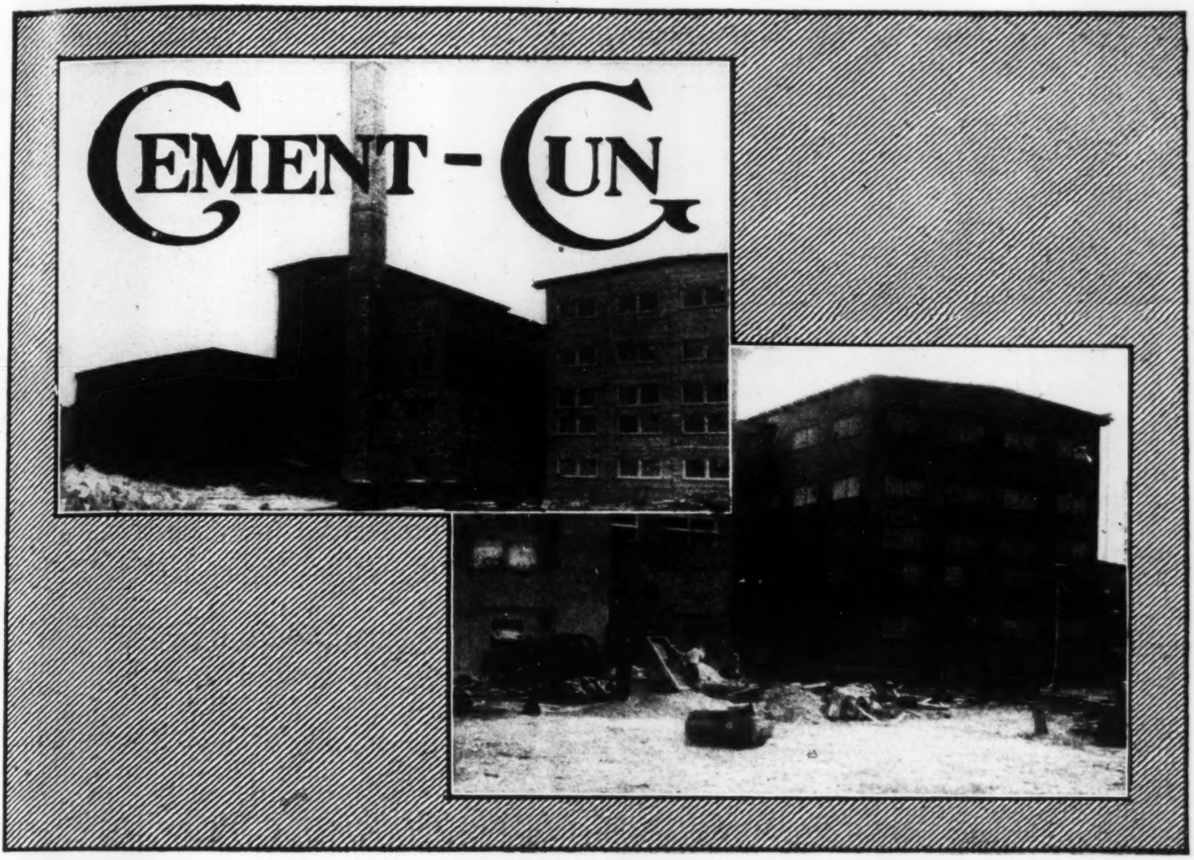
KOEHRING MACHINE CO.
MILWAUKEE, WIS.
Sales and Service Offices and Warehouses
in all parts of U. S.

5492

KOEHRING MIXER LOADER

The cost-saving way to load mixer from the subgrade. Cuts out all wheelers. Measures the proportions for every batch, is adjustable to measure all proportions for all capacity mixers. Measuring bins move along top of frame for convenient shoveling. Materials fed through bottom gates of bins to conveyor belt that shoots charge to charging skip at speed of 500 ft. per minute. Ask for Mixer Loader catalog C-137.





Fireproofing Wooden Mill Buildings

UP in Hillsborough, New Brunswick, a big fire completely destroyed the old mills of the Albert Manufacturing Company. *After* they had rebuilt their buildings according to "mill construction" classification (heavy southern pine frames, solid floors, 2-in. tongue-and-groove spruce sheathing), they thought of *fire-proofing*.

Cement-Gun did the trick. Strips of battens were nailed outside the sheathing; coarse wire netting stretched, and Gunite (the cement-sand product of the Cement-Gun) shot all over the buildngs.

Today fire cannot harm the outside of these buildings—they are encased in *stone*. Why not fireproof your wooden buildings in the same way?

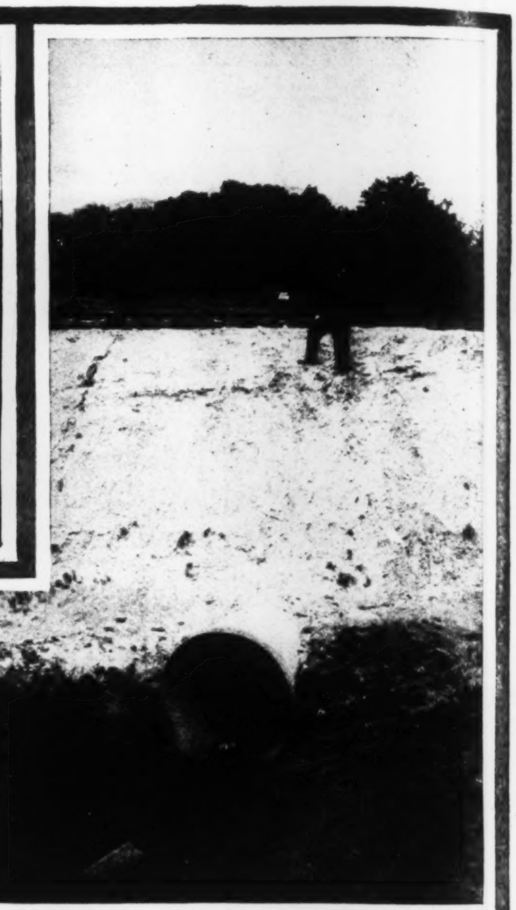
Write for bulletins on Cement-Gun work now.

CEMENT GUN COMPANY, Inc.
Allentown, Penna.

New York Office: 30 Church St.
Chicago Office: 1414 Fisher Bldg.
Los Angeles Office: Citizens Bank Bldg.
Spokane Office: Mohawk Block
Taylor Engineering Co., Vancouver, B. C.

R. E. Cleaton & Co., 20 St. Nicholas St., Montreal, Canada
General Supply Co. of Canada, Ltd., Winnipeg, Canada.

The Cement-Gun is not a restricted article. It may be purchased outright from us and used by anyone.



Reduce Your Labor Costs

Toncan Metal Corrugated Culverts are placed quickly by ordinary labor and, further, when once laid they are there to stay. Extremes of heat and cold will not damage them, floods will not loosen their ground grip and they stand up under the most severe traffic loads.

Toncan Metal SPC. TONCAN METAL Corrugated Culverts

Resist Corrosion

The reason is that those impurities which promote corrosion have been removed. The metal is of uniform density and good all the way thru. Years of use under most trying conditions have proven that there is nothing more durable made from iron ore. In SPC. Toncan Metal we have a sheet manufactured especially for culverts. Every sheet is full weight to gauge and carries two ounces of galvanizing to every square foot of double exposed surface.

If you are interested in better iron and better culverts you will be interested in our 100 page book, "Corrosion—The Cause—The Effect—The Remedy." This contains authentic information appreciated by those who want to know the reason of things. For the past several years it has been in great demand as a reference book by architects, contractors, engineers and colleges. As long as the supply lasts we will send the book with our compliments to those who request. The demand this Spring has been exceedingly severe and we suggest an early inquiry if you are interested.

Tell us of the culvert work you have in mind and we will put you in touch with the culvert manufacturer nearest you who can supply your needs promptly. Toncan Metal Culverts are ready for immediate delivery from numerous points thruout the United States and Canada. Kindly address Department Q24.

THE STARK ROLLING MILL COMPANY, Canton, Ohio

As Long or as Short as You Want It

A Ferguson standard building can be built any length or width, conforming with given units of measurement.

The Standard No. 3, shown in the illustration, can be extended to any length in units of 20 feet and to any width in units of 50 feet.

An Owner can erect as small a building as he wishes and expand it to accommodate increased business at any time in the future by removing an end or side wall.

An Owner can erect a Ferguson Standard Building with his own building force or his local Builder.

Ferguson will sell him steel, timbers and sash at market prices, with complete erection instructions, and make prompt shipment on receipt of order.

When increased business demands additions the same building force or local builder can obtain the necessary Ferguson materials and perform the additional construction.

FERGUSON ORIGINATED STANDARD FACTORIES

For further information regarding Ferguson Standard or Special Buildings, Phone, Wire or Write

The H. K. Ferguson Company

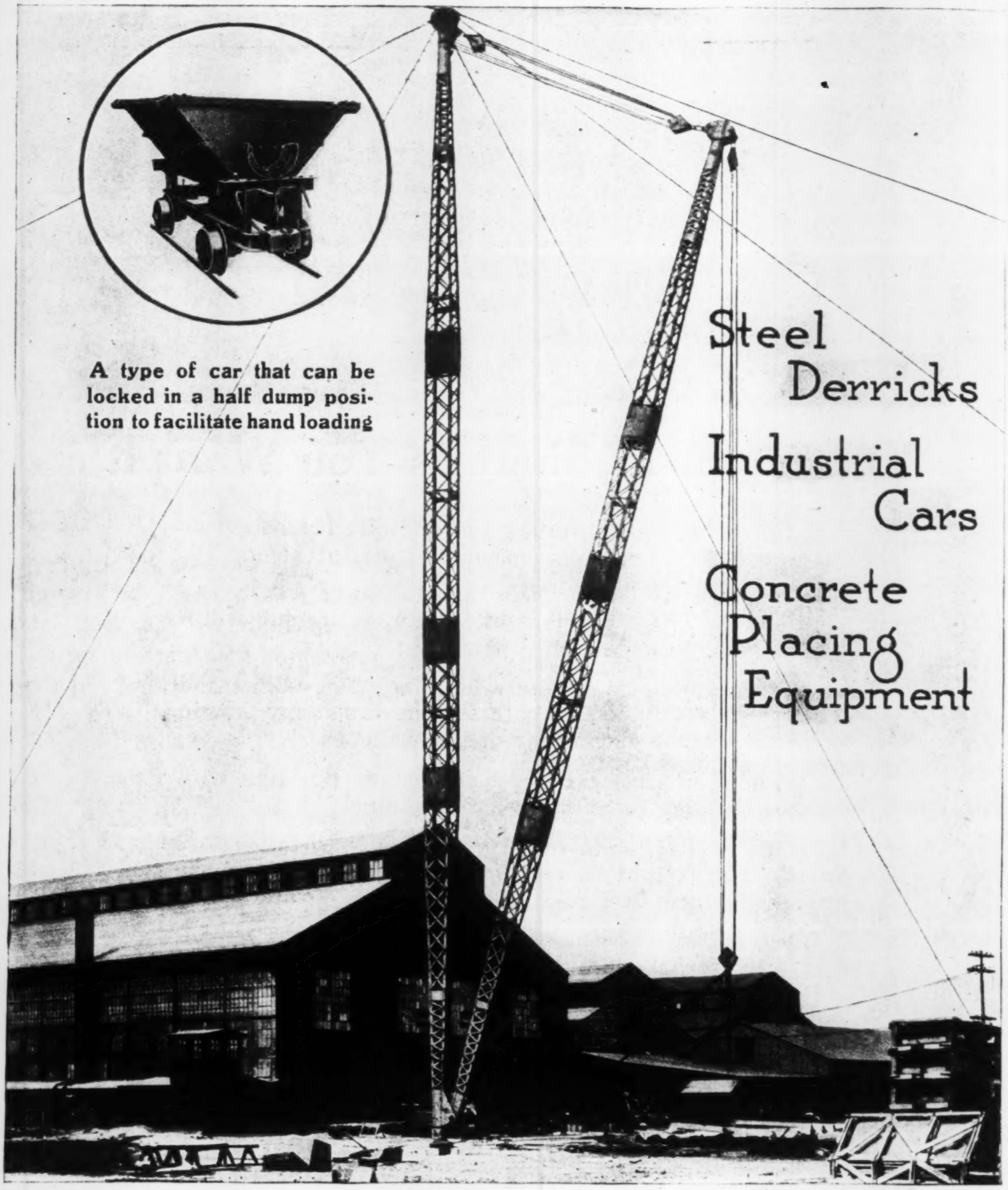
Engineers and Builders

6523 Euclid Avenue CLEVELAND, OHIO Rosedale 6854

FERGUSON ORIGINATED STANDARD FACTORIES

Ferguson

STANDARD AND SPECIAL BUILDINGS


Steel
Derricks
Industrial
Cars
Concrete
Placing
Equipment

A type of car that can be locked in a half dump position to facilitate hand loading

Insley Engineering Service has designed a large number of the concrete plant layouts that have been used on recent important Government construction projects. This same service is at your disposal.

INSLEY MANUFACTURING CO.

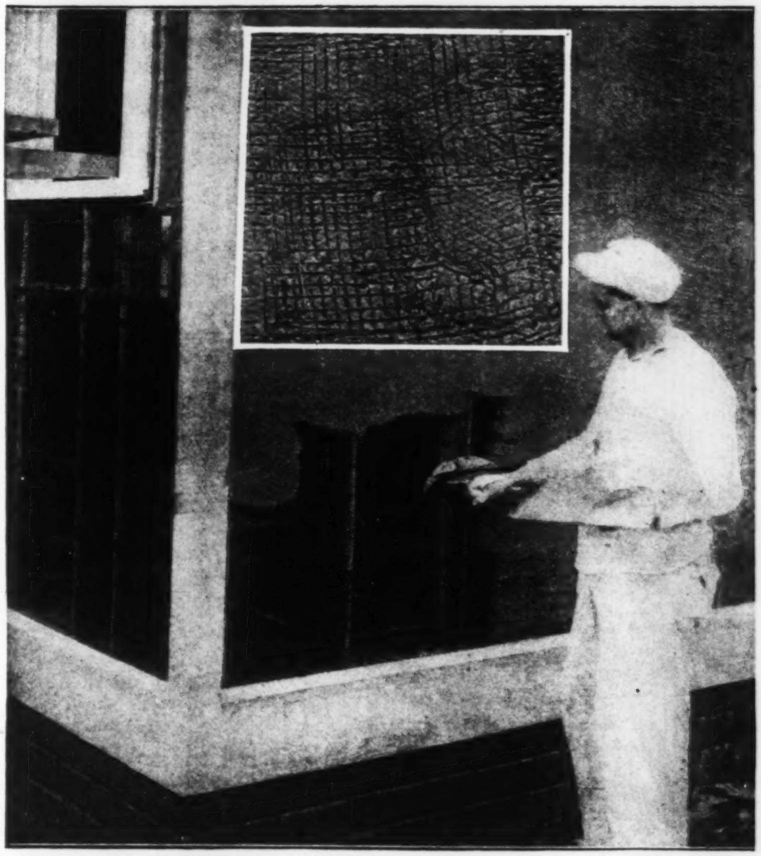
Engineers INDIANAPOLIS, INDIANA **Manufacturers**

NO. 16

For Stucco Construction

A quickened sense of fire risk, scarcity of lumber and the high cost of paint and labor have turned the attention of builders everywhere to stucco for exteriors.

Stucco gives beauty, adaptability, fire-resistance, enhanced value, actual economy and permanence, if it is properly applied to *the right backing*.



Berger's Expanded Metal Lath

A consideration of cost, fire-resistance, freedom from cracking and permanence, in the light of careful examination of dozens of Stucco houses will add considerable weight to our recommendation:—

"Use Stucco on Berger's Expanded Toncan Metal Lath applied direct to studding and back-plastered".

Expanded Metal Lath is a reinforcement in every direction, Toncan Metal gives extra assurance of permanence under trying conditions.

Your nearest Berger Branch can supply the lath and they'll gladly send you Metal Lath Handbook F-24—Write today.

The Berger Mfg. Co., Canton, Ohio

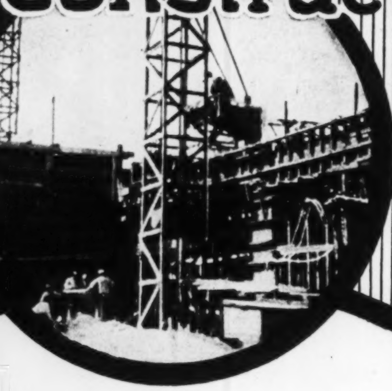
Branches: Boston New York Philadelphia Chicago St. Louis Minneapolis San Francisco
Export Dept.: Berger Bldg., New York City, U. S. A.

BERGER

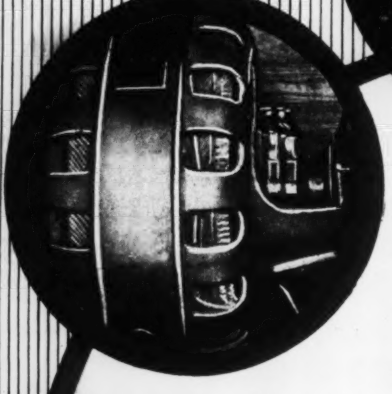
BERGER

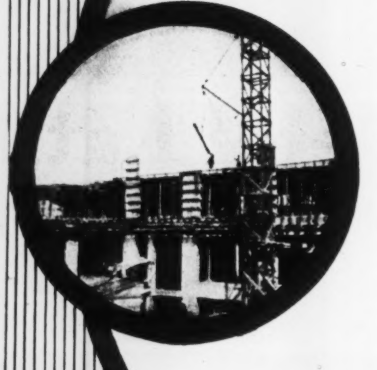
EXPANDED METAL LATH-FLOOR CORES-REINFORCING PLATES-METAL LUMBER
STEEL FILING CASES-LOCKERS-FACTORY STORAGE BINS AND SHELVING
STEEL CEILINGS-ROOFING-SIDING AND OTHER PRESSED STEEL PRODUCTS

Electrification Cuts Costs on a big Construction Job



Electricity speeded up the Concrete Mixing and Distributing the Form Work, the Steel Placing, the Roofing.—





WHEN Turner built the American Can Factory in Brooklyn — a 200 x 300 ft. building consisting of 6 stories and basement and involving 22,000 cu.yds of concrete — *electricity* reduced the construction costs. The same power that helped break records in shipbuilding, steel production, and coal mining was called upon to get this building up in shorter time — for less money. And it succeeded.

To electrify a job is to keep pace with progress. *To select the right electrical equipment is just as important.*

This particular job was typical of most construction work. These Westinghouse motors operated in dusty, dirty, damp surroundings. Two were about $3\frac{1}{2}$ years old; another, over $4\frac{1}{2}$ years. All were veterans of five or six previous hard jobs, equally dusty, dirty and damp. All were still in *excellent condition*. None had needed much repairing.

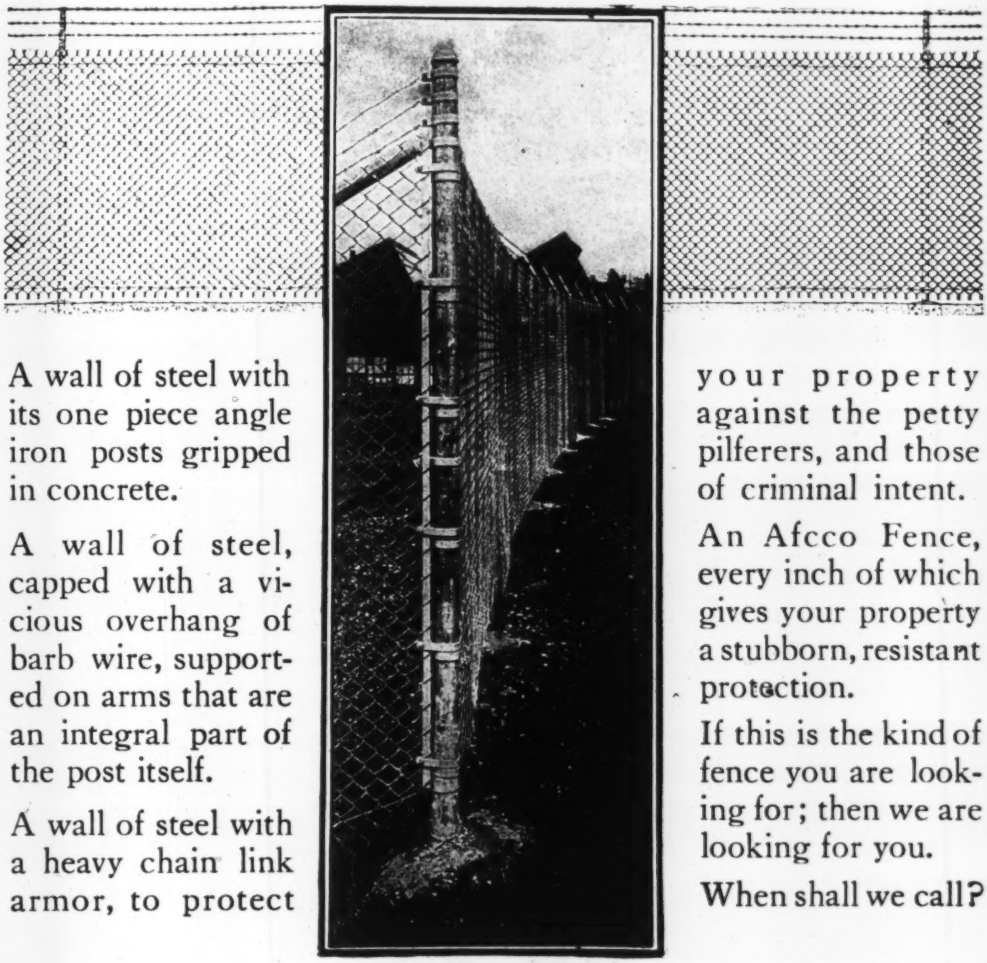
Whether you face the question of selecting electrical equipment, rearranging present electrical equipment, or applying electric power to apparatus now driven by other means, the services of Westinghouse Engineers are at your disposal to help you cut costs and speed your work.

Westinghouse Electric & Mfg. Co
East Pittsburgh, Pa.
Sales Offices in All Large American Cities

W
WESTINGHOUSE ELECTRIC

Westinghouse

There the Fence Stands With Its Stubborn Wall of Steel



A wall of steel with its one piece angle iron posts gripped in concrete.

A wall of steel, capped with a vicious overhang of barb wire, supported on arms that are an integral part of the post itself.

A wall of steel with a heavy chain link armor, to protect your property against the petty pilferers, and those of criminal intent.

An Afcco Fence, every inch of which gives your property a stubborn, resistant protection.

If this is the kind of fence you are looking for; then we are looking for you.

When shall we call?

American Fence Construction Co.

108 Church Street, New York

How the Domestic Buyer
by this "Allied"

A Machine for Every Job

The Men a Parsons Replaces

PARSONS TRENCH EXCA
AND BA

Clyde Boiler Anchorage Is Most Rigid and Substantial

CLYDE IRON WORKS

Hoisting Machinery

Lakewood Plant Helped Build This Bridge

Lakewood Construction Plant

Austin Road Scarifiers

The Complete Austin Line

ROAD MACHINERY

C.H.&E.

Portable Saw Rigs

Short Cut Your Work

C. H. & E. Manufacturing Co., Inc.

SAW RIGS

The Allied Construction Machinery Corporation

Under the Management of the American International Corporation

120 Broadway, New York City

Export Representatives for

The Lakewood Engineering Co., Cleveland
The Thew Automatic Shovel Co., Lorain, O.
The Austin Manufacturing Co., Chicago
The Western Wheeled Scraper Co., Aurora, Ill.
The Barber-Greene Co., Aurora, Ill.
The Parsons Co., Newton, Iowa
The Clyde Iron Works, Duluth, Minn.
The Carbic Manufacturing Co., Duluth, Minn.
The Sterling Wheelbarrow Co., Milwaukee, Wis.
The C. H. & E. Manufacturing Co., Milwaukee, Wis.
The Hydraulic Pressed Steel Co., Cleveland (Concrete Form Dep't)

Carbic

Service Simplicity Economy Efficiency in Carbic Lights

PORTABLE ACETYLENE APPA

Construction & La

for Export has Benefited Export Service

These non-competing American manufacturers have, during the last few years, developed a most successful cooperative plan for serving the foreign buyer.

In the development of this export service much of the equipment has been standardized, resulting in higher perfection of product, more efficient manufacturing methods and higher engineering ability.

While these advances are due, primarily, to the efforts of these manufacturers to perfect a cooperative service to the foreign buyer—

The Domestic Buyer for Export

is also offered highly perfected and standardized equipment for all kinds of construction (buildings, bridges, excavation, roads, sewers, etc.), as well as for conserving labor and increasing industrial efficiency.

Catalogues and complete information will be sent on request.

Note 14-page display section in July 3rd issue.

Allied Machinery Company
New York City

Industry Service

Street Grading

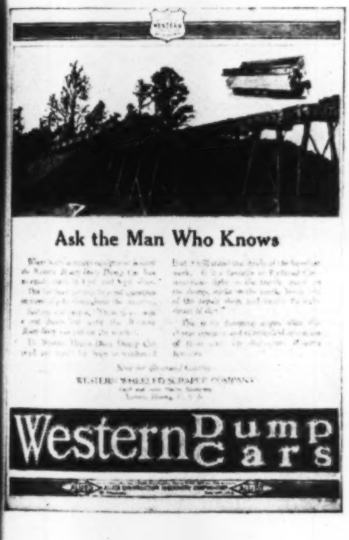
THEW Power Shovels

Sterling

The Reasons for Sterling Wheelbarrow Superiority

STERLING WHEELBARROW COMPANY

WHEELBARROW



Ask the Man Who Knows

WESTERN WHEELED SCRAPER COMPANY

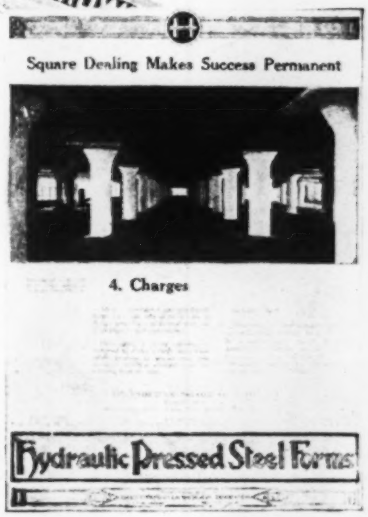
Western Dump Cars

How a Contractor Solved His Paving Problem with a B-G Self-Feeding Bucket Loader

Loader Feeds Itself

BARBER-GREENE COMPANY

B-G LOADERS

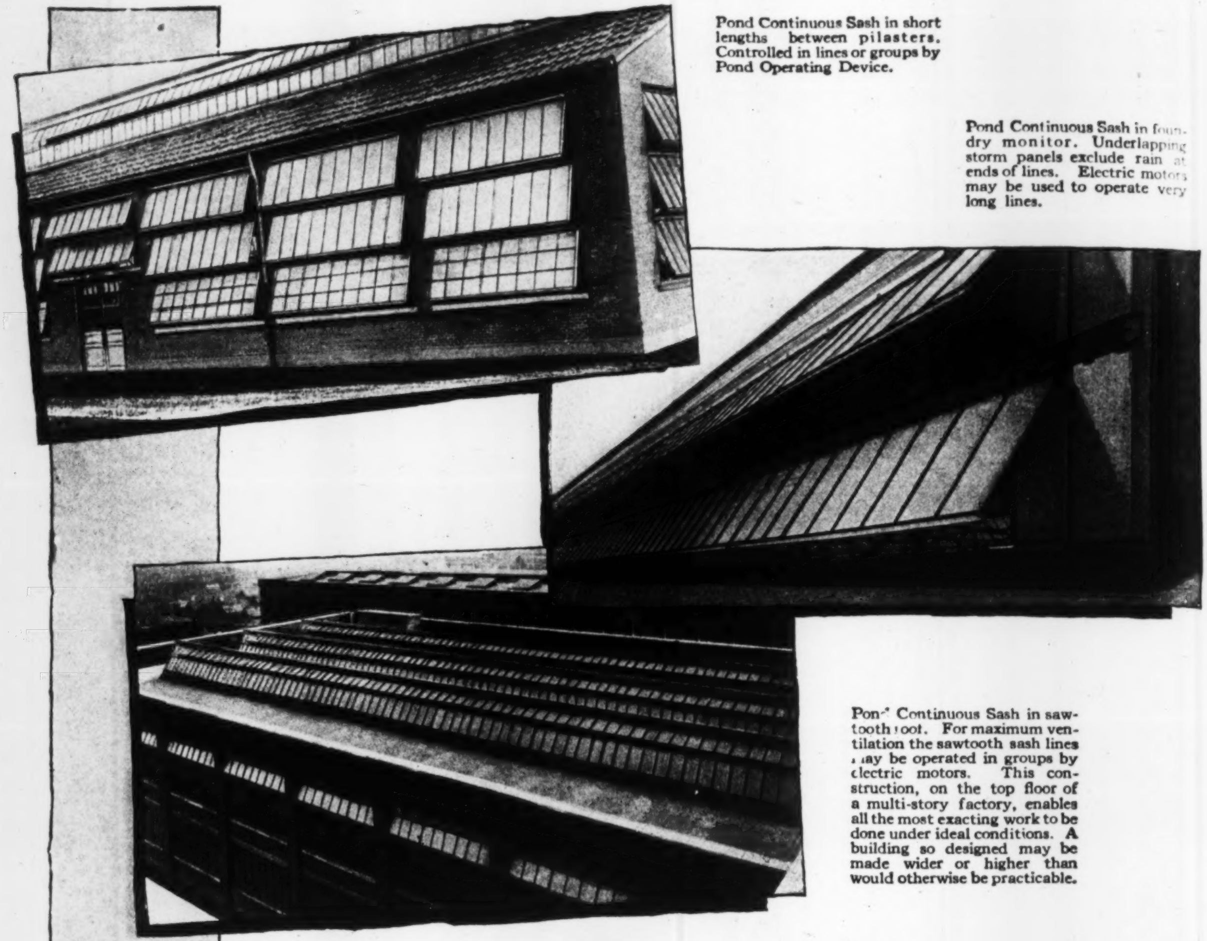


Square Dealing Makes Success Permanent

4. Charges

Hydraulic Pressed Steel Forms

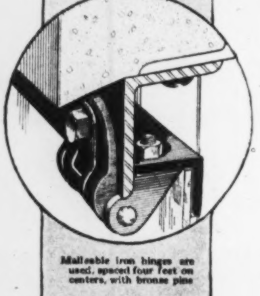
or Saving Machinery



Pond Continuous Sash in short lengths between pilasters. Controlled in lines or groups by Pond Operating Device.

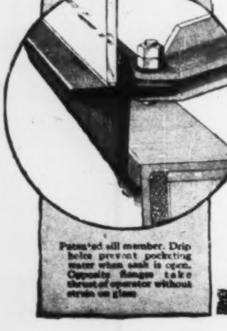
Pond Continuous Sash in foundry monitor. Underlapping storm panels exclude rain at ends of lines. Electric motors may be used to operate very long lines.

Pond Continuous Sash in sawtooth roof. For maximum ventilation the sawtooth sash lines may be operated in groups by electric motors. This construction, on the top floor of a multi-story factory, enables all the most exacting work to be done under ideal conditions. A building so designed may be made wider or higher than would otherwise be practicable.



Malleable iron hinges are used, spaced four feet on centers, with bronze pins

Pond
CONTINUOUS SASH
PATENTED
WEATHER-PROOF WHEN OPEN



Patented sill member. Drip holes prevent pocketing water when sash is open. Opposite flanges take thrust of operator without strain on glass

More Air

The intensive production of tomorrow demands a new standard of ventilation.

Not merely larger openings, but *mass control*, is often the answer. Stop depending on the individual workmen to open windows and place entire control in the hands of the foreman.

POND CONTINUOUS SASH does just that. When hung outside of structural work, with underlapping storm panels at the ends of lines, it is fully weather-protecting. The Pond Operating Device, with spirals and counterweights to balance the load when open, renders control of long lines easy.

Wider buildings, better planned buildings, and larger output follow the correct use of Pond Continuous Sash.

We gladly co-operate with architects and engineers. Shall we send booklets on the use of Pond Continuous Sash?

DAVID LUPTON'S SONS COMPANY

Tulip and Westmoreland Sts. Philadelphia, Pa.

Makers of modern equipment for daylighting and natural ventilation

Canadian Manufacturers: The A. B. Ormsby Co., Ltd., Toronto.

Pond Continuous Sash is top-hung under an overhanging angle, and overlaps storm panels 2 feet wide at the ends. Its 20-foot units are connected by weather proof expansion caps giving needed flexibility for alignment with steel work.

Its members are extra heavy and rigid; all joints are oxy-acetylene welded. Control in long lines is made easy by the patented Pond Operating Device, hand or motor driven.

Immediate deliveries from stock.

Lupton
INVESTMENT VALUE

PURCHASING

Thirty-five Years' Study of Markets

THE careful, scientific selection of materials and their purchase at the most favorable terms and prices are quite as important factors in our service as the actual design and construction of a project.

Before being accepted as suitable for the purpose, materials submitted to us are carefully and searchingly tested by our experts in our own laboratories. Failure to measure up to our rigid specifications means prompt rejection.

The manager of our purchasing department has been in continuous employment with us in that capacity for twenty years. He is posted on sources of supply located in every part of the world. His grasp of markets and materials has saved our clients large sums.

Furthermore the magnitude of our operations results in our commanding prices not available to the smaller buyer, and is a substantial factor in cutting construction costs.

WESTINGHOUSE CHURCH KERR & CO., Inc.

Engineers & Constructors

37 WALL STREET, NEW YORK

MONTREAL
Shaughnessy Bldg.

WASHINGTON
Wilkins Bldg.

ENGINEERS and CONSTRUCTORS
A purely engineering organization with nothing to sell except services.
W·C·K

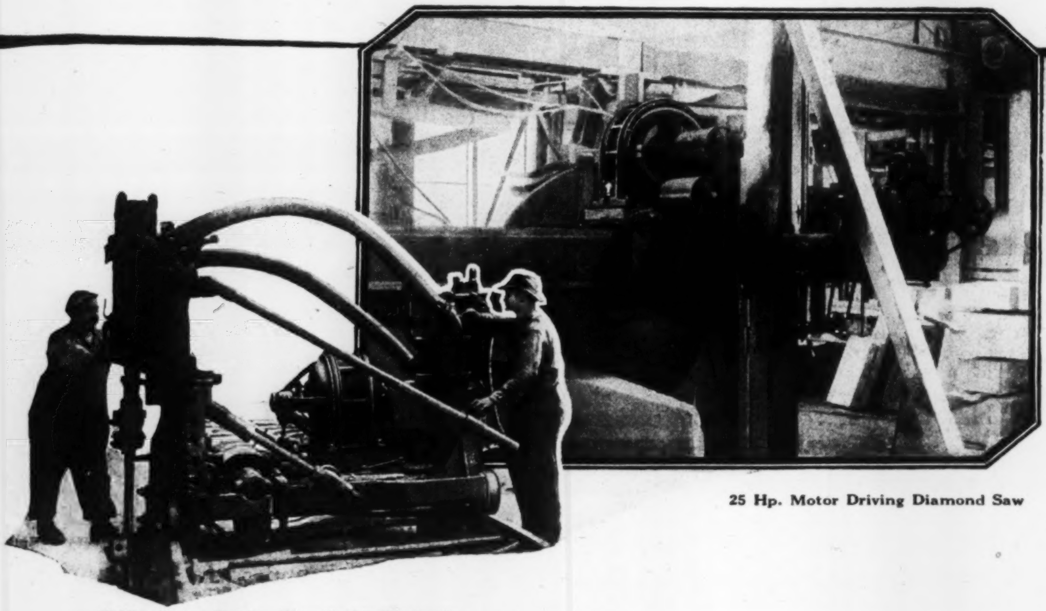
CHICAGO
Conway Bldg.

SAN FRANCISCO
Southern Pacific Bldg.

DALLAS
Western Indemnity Bldg.

No. VI

Dependable. Economical Electric Power from Central Stations Is Being Widely Used in Quarries



25 Hp. Motor Driving Diamond Saw

22 Hp. Motor Driving Electric Air Channeler

Marble Quarrying and Finishing Is Readily Done With Electric Power

Electric power is generated in large quantities very economically and dependably.

It is transmitted to portable machinery about the quarry easily by running a wire to the point of use.

This power is easily applied by strong, reliable G-E motors which reliably operate at high efficiency.

Our Bulletin No. 48023, "Electricity in Quarrying and Finishing Marble," would interest you. Send for a copy.

General Electric Company

General Office Schenectady, N.Y.

Victor Perard

ASCO Service lights the way to export markets

Dependable service is needed today more than ever before.

The foreign buyer of machinery and equipment demands service—the manufacturer, if he would share in the growing overseas business, must have it.

Service by experts both in construction and consultation, plus an expert knowledge of every export trade requirement and the requisite facilities to comply with them.

All this you will find in

ASCO

Our Engineering Department will secure and ship a single piece of machinery or an entire manufacturing equipment.

Engineering Booklet on request.

AMERICAN STEEL EXPORT COMPANY
Woolworth Building, New York, U. S. A.

PRODUCER ASCO CONSUMER

"This advertisement was scheduled to appear in the June 19th issue. Delay in its transmission made this impossible. The new price on the Lakewood Road Finisher will, therefore, not become effective for readers of Engineering News-Record until July 3rd. Orders will be accepted at the old price, by mail or wire, until that date."

The upper picture on the opposite page is the Lakewood Road Finishing Machine we began telling you about two years ago to sell for $1,250.00, f.o.b. Milwaukee.

The lower view shows the latest 1919 model which we have been selling at the price established for the 1917 and 1918 models.

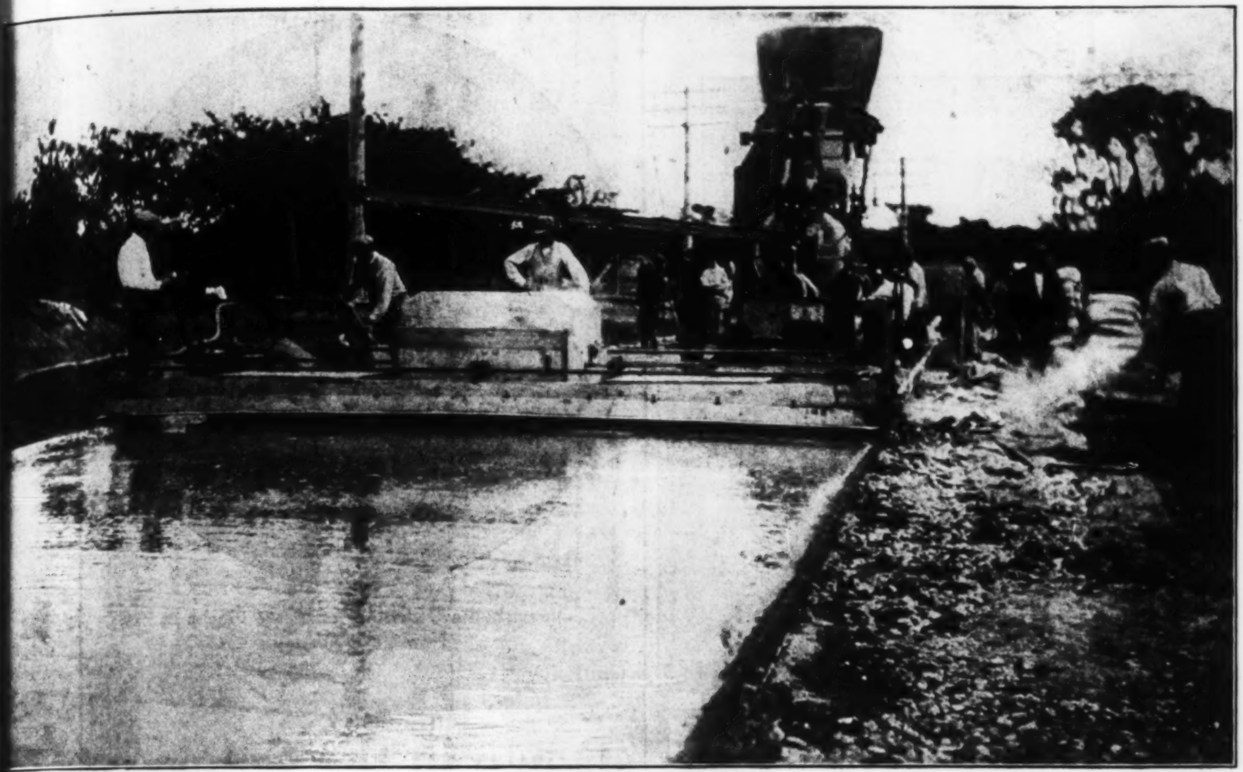
To help get business going early in the year we advertised generally that we would not change any of our prices before July 1.

Beginning July 1, 1919, the price of the 1919 Model Lakewood Road Finishing Machine will be $1,650.00, f. o. b. Cleveland, for 16, 18 or 20-foot road widths and 1-inch or 2-inch crowns.

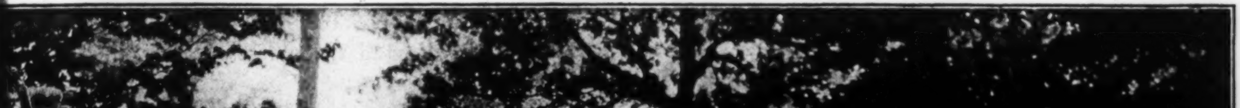
This price is effective from July 1, to December 31, 1919.

THE LAKEWOOD ENGINEERING COMPANY
Cleveland, U. S. A.

Offices in New York, Boston, Philadelphia, Washington, Pittsburgh, Detroit, Chicago, Milwaukee, Salt Lake City, Los Angeles, Seattle, Kansas City Oklahoma City and Houston

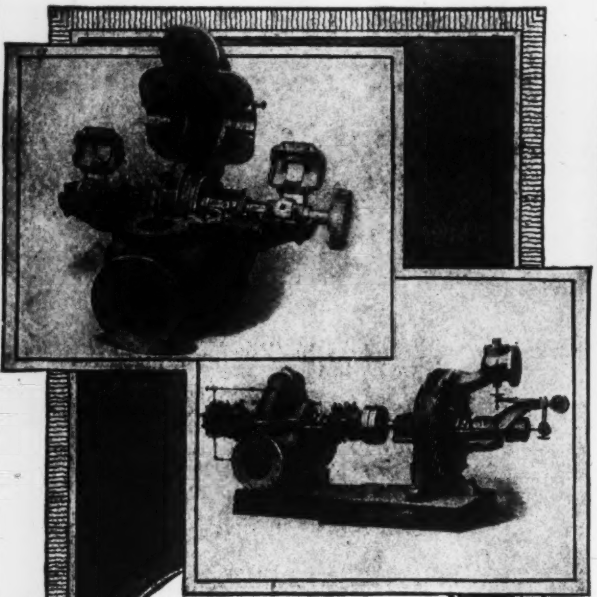


1917-18 *Model*—$1,250.00 *f.o.b. Milwaukee.*



1919 *Model*—$1,650.00, *f.o.b. Cleveland.*

We had more work at Milwaukee than that plant could handle.
Greater manufacturing facilities at the Cleveland plant insure more prompt delivery.

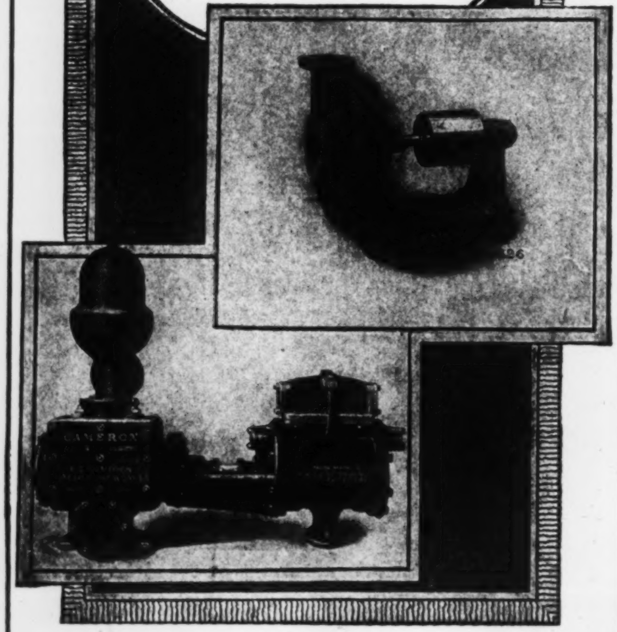


Cameron pumps have attained that peculiar degree of excellence where they have an individuality of their own. For any drive—for any service specify CAMERON. There is one for every need.

Send for Bulletins

A. S. Cameron Steam Pump Works
11 Broadway, New York
Offices the World Over

10CM



"Jackhamer" drilling concrete blocks in New York subway

Down in the Subway

The building of the New York subways was and is a stupendous feat of engineering. Such projects are made possible only by modern methods which demand the use of the best of modern tools.

"Jackhamers" drilled the underpinning of New York City, at times far below the surface—at times immediately under the hurrying feet of millions.

Swiftly and surely "Jackhamers" drove their way through solid rock, working day and night, efficiently and steadily. "Jackhamers" helped immeasurably to turn romance into reality—to complete miles of tunnel and cut under the heart of the greatest city.

Send for Bulletin 4321

INGERSOLL-RAND
COMPANY

GENERAL OFFICES, 11 BROADWAY, NEW YORK

DOMESTIC OFFICES

BUTTE
JUNEAU
DULUTH
DENVER
BOSTON
EL PASO
SEATTLE
ST. LOUIS
CHICAGO
NEW YORK
KNOXVILLE
SCRANTON
HOUGHTON
CLEVELAND
PITTSBURGH
BIRMINGHAM
LOS ANGELES
DETROIT
NEW ORLEANS
PHILADELPHIA
SAN FRANCISCO
SALT LAKE CITY
JOPLIN

FOREIGN OFFICES

LONDON
PARIS
MADRID
MILAN
RIO DE JANEIRO
MONTREAL
MEXICO CITY
MELBOURNE
KALGOORLIE
JOHANNESBURG
SANTIAGO, CHILE
LIMA, PERU
KOBE, JAPAN
MANILA
TOKIO
HONOLULU
HAVANA
BUENOS AIRES
ANTOFAGASTA
LA PAZ, BOLIVIA
VANCOUVER B. C.

APPLY TO NEAREST OFFICE

187-JD

"LITTLE TUGGER"

The "ONE MAN" Hoist

One "Little Tugger" operator can hoist or haul the load without any assistance. The hoist is so constructed that its drum can be thrown out of gear by a single motion of one lever, allowing the cable to run freely off the drum. The cable can then be conveyed to the "hitching" point by the operator. This means a SAVING IN POWER as well as LABOR as this cable does not have to be payed out under power.

This particular feature is but one of many money saving qualities of the "Little Tugger" Hoist. Bulletin 4333 may suggest a way for you to reduce operating expense. A copy will be sent you upon request.

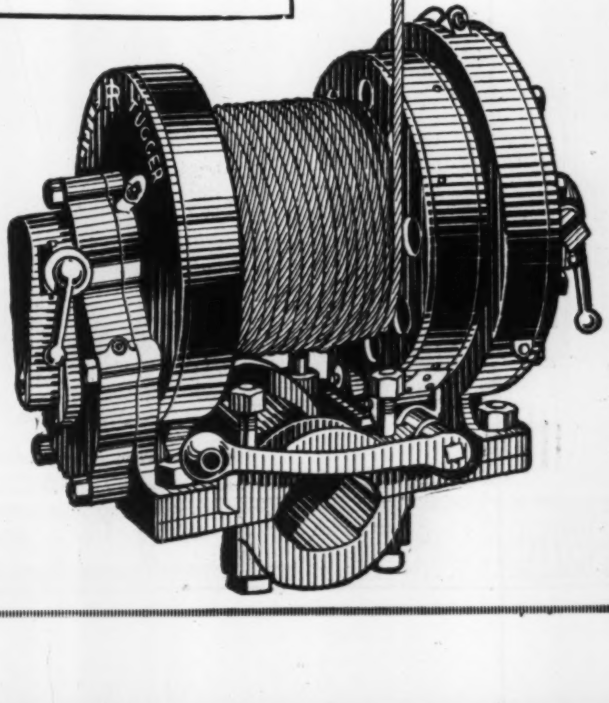
"LITTLE TUGGER"

Works equally well on compressed air or steam.
Hoists loads up to 1000 lbs.
Can be mounted anywhere in any position.

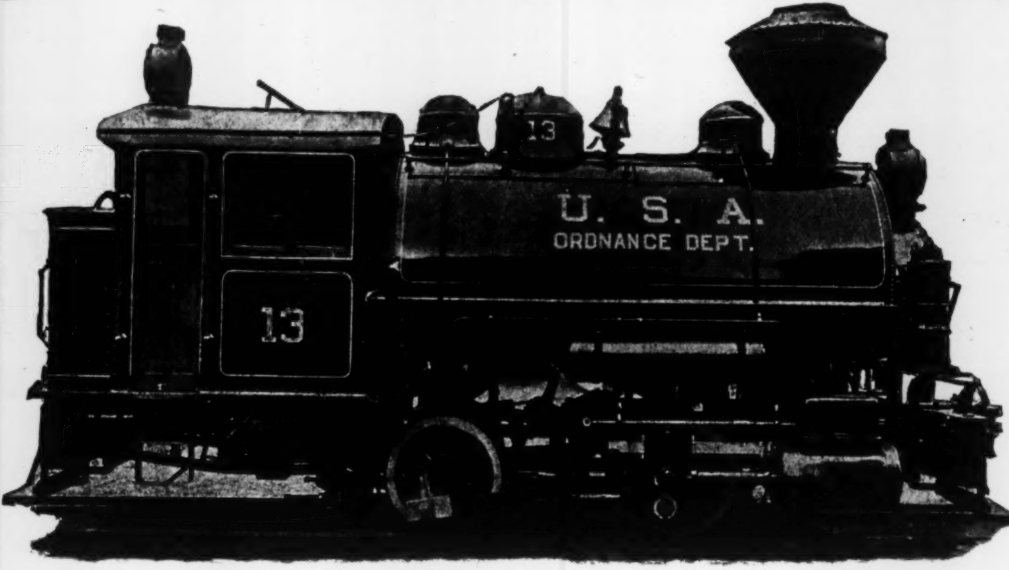
Ingersoll-Rand Company
11 Broadway, New York
165 Q. Victoria St., London

Offices the World Over

60-LH



VULCAN



Special Locomotives for Special Places

WHERE inflammable or explosive materials have to be transported in bulk, the locomotive must be built so that perfect safety may be assured.

Not only must sparks from the smoke stack be arrested, but no hot coals must be dropped from the ash pan. The equipment must be so designed that no burning or very hot materials can be dropped accidentally where they might come in contact with anything inflammable or explosive.

Special VULCAN Locomotives are built with spark and fire arresting devices of such a dependable character as to afford absolute protection in powder and dynamite plants, in lumber yards, around saw mills or in the timber in dry weather.

Correspondence Invited

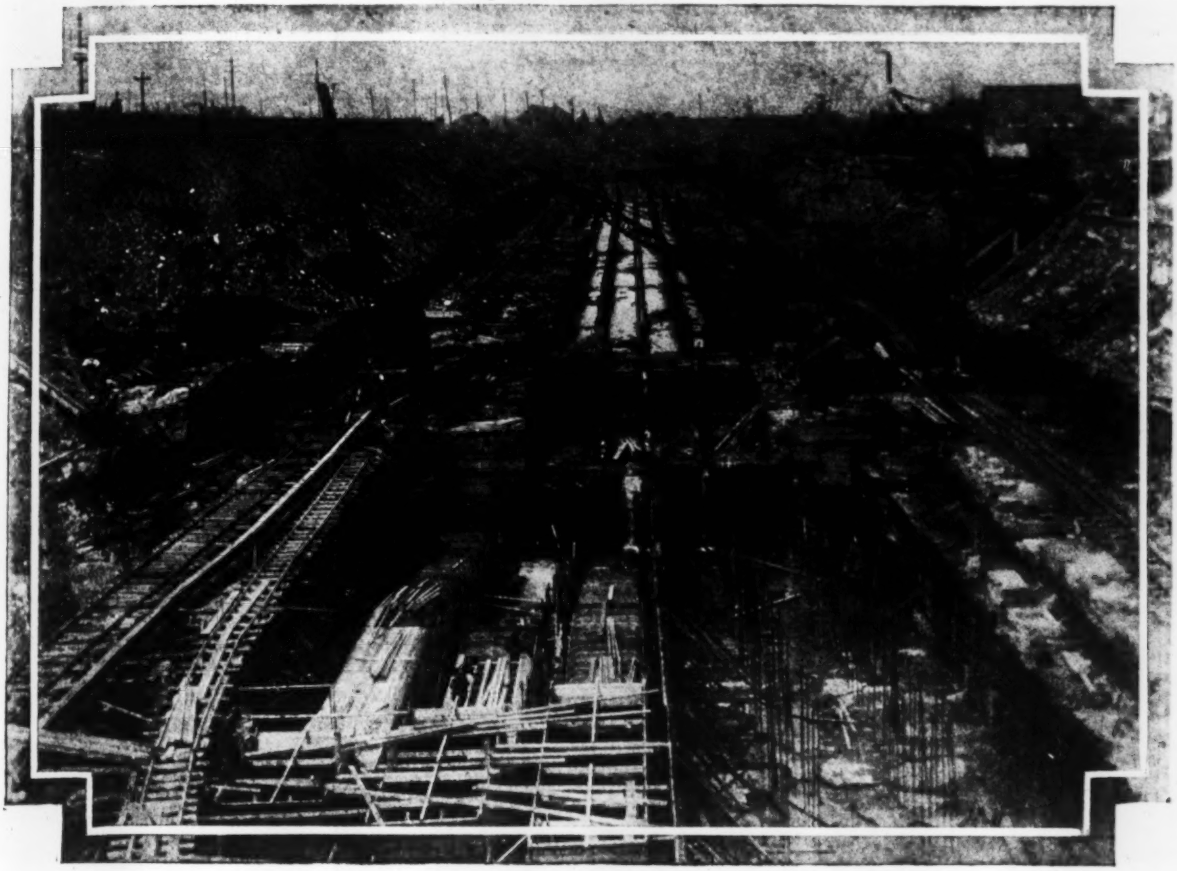
VULCAN IRON WORKS, 1737 Main St., Wilkes-Barre, Pa.

Locomotive Builders for Forty-Eight Years.

5893-1687

Creosoting Plant of Jennison-Wright Co.

VULCAN



Industrial Cranes

Erecting Concrete Forms

Five separate operations were being handled while these 25-ton Industrial Cranes hurried up the Calumet Sag Channel. John O. Heyworth knew the versatility of Industrial Cranes, so, besides using a drag scraper bucket, his cranes laid their own track, drove piles with a steam hammer rig, handled grab bucket and did the heavy material handling. It is performance like this that keeps Industrial Cranes first in favor wherever there is heavy lifting to do. There is a size and type for practically every requirement.

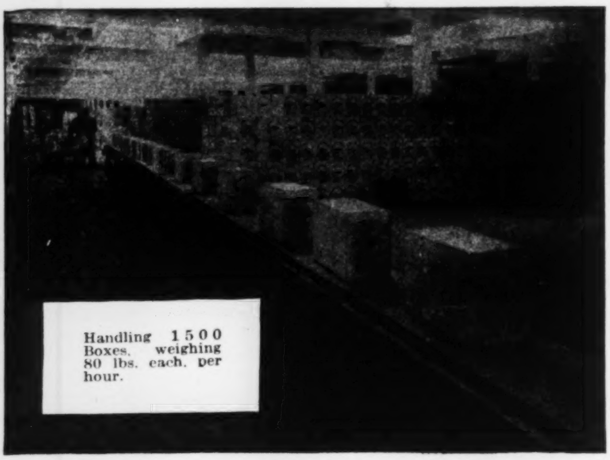
INDUSTRIAL WORKS

Bay City, Mich.

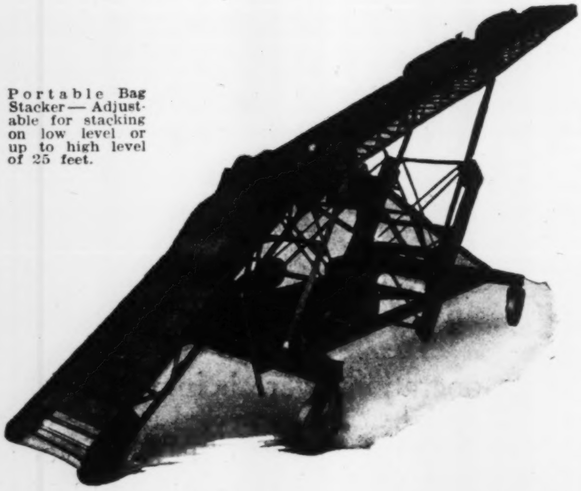
NEW YORK	**PHILADELPHIA**	**DETROIT**	**CHICAGO**
50 Church St.	**Widener Bldg.**	**Book Bldg.**	**McCormick Bldg.**

Agents: C. B. Davis Engineering Co., Birmingham, Ala.; J. G. Miller, St. Louis, Mo.; F. H. Hopkins & Co, Montreal, Que.; N. B. Livermore & Co., San Francisco, Calif.; Northwestern Equipment Co., Portland, Oregon and Seattle, Washington.

Products: Locomotive, Erection and Wrecking Cranes, 5 to 160 tons capacity. Pile Drivers, Pillar Cranes, Transfer Cranes, Rail Saws.



This Portable Belt Conveyer is doing the work that formerly required 30 men with hand trucks.



Portable Bag Stacker — Adjustable for stacking on low level or up to high level of 25 feet.

Handling 340 lb. bags in warehouse.

This stacker is designed for piling from a minimum height of 6 ft. to a maximum of 14 ft. 6 in.

Handle it Mechanically

Save

Labor
Time
Storage Space

By using

JEFFREY PORTABLE CONVEYERS

For handling and piling boxes, sacks, packages, bags, etc., they are money-savers on a big basis.

Portable Belt Conveyer

Made up of short, easily connected sections of any length desired. Can be easily run from one part of building to another. Avoids the delay incident to unloading of hand trucks, and does the work of a large number of men and trucks at far less cost.

Portable Bag Stackers

Especially adapted for handling and stacking bags, boxes, etc., breaking down piles and for loading material onto shipping platform, into freight cars, etc. Save Labor and Time and increase warehouse capacity by allowing higher piling. Designed for heavy duty, yet of light weight. Only two men required to push them about.

Our new Bulletin No. 266A

gives details of construction, and features interesting installations of Jeffrey Portable Conveyers and Stackers. Send for your copy.

The Jeffrey Mfg. Co.
Columbus, Ohio

New York
Boston
Philadelphia
Scranton
Pittsburgh
Charleston, W. Va.
Cleveland
Chicago
St. Louis
Birmingham
Dallas
Milwaukee
Denver
Seattle
Montreal

Handle it Mechanically

AUTO-CRANE Efficiency Cuts Road Building Costs

MATERIAL handling is a mighty big factor in road building costs. BYERS AUTO-CRANES provide a most EFFICIENT method of handling road material and consequently an effective weapon for fighting high costs.

An AUTO-CRANE will jump right into a road building job at the very start. It will transfer materials from railroad cars on the siding directly into overhead bins, into waiting motor trucks or on to the roadbed itself. Grading, excavating, etc., are strictly AUTO-CRANE jobs. It gives efficient crane service and will handle with ease the every-day tasks of the road builder and general contractor.

AUTO-CRANES are built in a choice of Steam, Gasoline or Electricity, for Power and with Mountings of Road Wheels, Rail Trucks and Caterpillars.

The Good Roads Movement Is On!

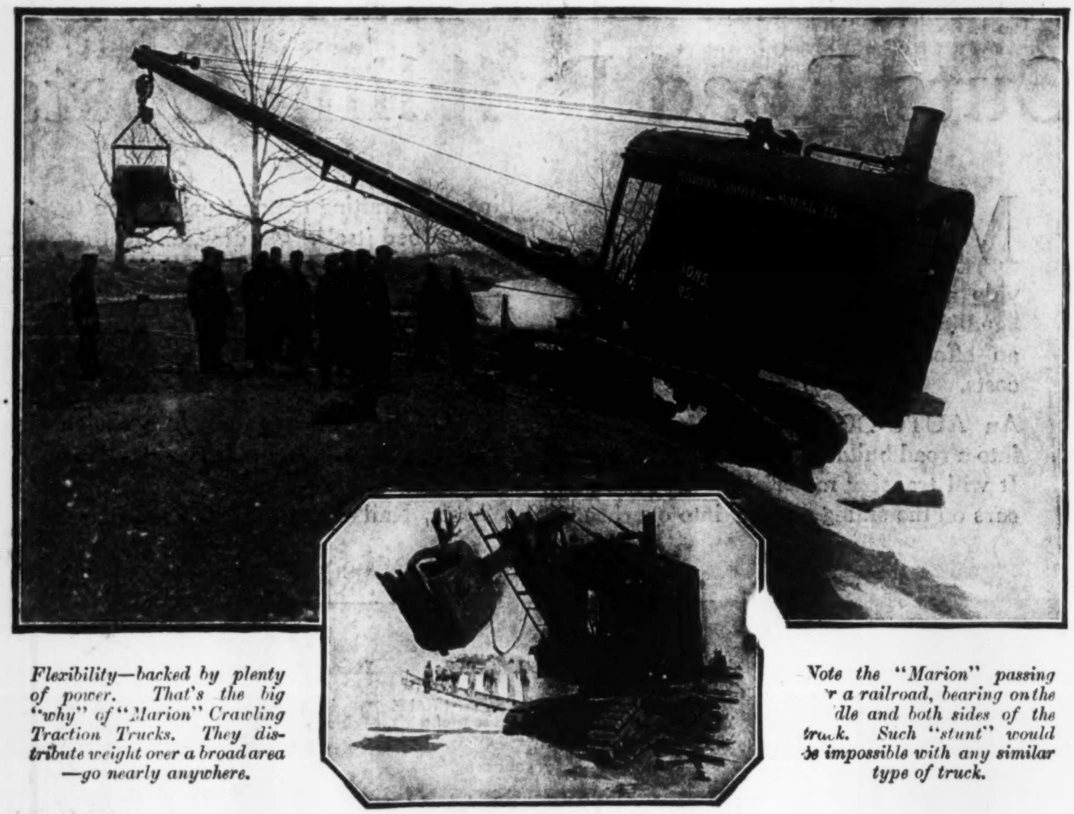
Bulletin 1015 tells how the AUTO-CRANE will enable you to handle most profitably your share of road building jobs.

Wite TODAY for your copy.

THE JOHN F. BYERS COMPANY
250 Sycamore Street
RAVENNA, OHIO

Byers AUTO-CRANES

TRADE MARK BECKWITH PATENTS



Flexibility—backed by plenty of power. That's the big "why" of "Marion" Crawling Traction Trucks. They distribute weight over a broad area—go nearly anywhere.

Note the "Marion" passing r a railroad, bearing on the dle and both sides of the truck. Such "stunt" would be impossible with any similar type of truck.

Take the "Short Cut" to the Next Job!

Here is a Model 36 "Marion" owned by A. V. Wills & Sons, on its way to work on a levee job near Brewster, Ill. It is going up this steep bank under its own mighty power—shoving along, tank-fashion, just as though it were an ordinary stunt for shovels to climb steep grades without help.

Even *that* wasn't all. This same machine had crossed a frozen creek just a few minutes earlier—without outside help of any kind. It smashed into the ice, sloughed through the mud, bucked the bank—and went over the top with a hurrah.

That's the real "Marion" spirit—the spirit that tackles jobs with a vim, then *sees them through.* There's no "laying down" to a "Marion"—you can always count on its being in as strong at the finish as at the start.

Let us help you plan that new job. Te us what you have to do and we w show you how "Marions" will help u do it.

THE MARION STEAM SHOVEL COMPANY

Established 1884 Marion, Ohio

CHICAGO NEW YORK SAN FRANCISCO

Marion

Efficient Water Pressure

Charles E. Golden
President and General Manager

Mr. Golden says:

"Those surges and fluctuations in your distribution lines mean money loss to you. Install—

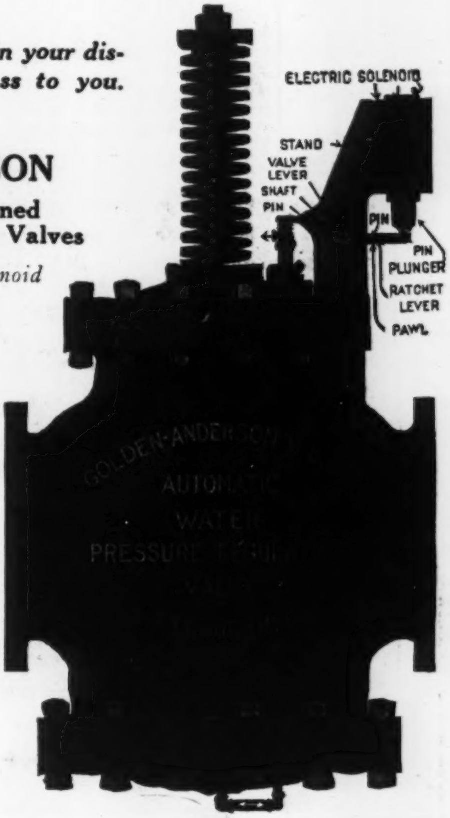
GOLDEN-ANDERSON

Patent Automatic Cushioned Water Pressure Regulating Valves

Furnished with or without Solenoid Attachment

and you will save many times the amount of the slight outlay in both **operating** and **maintenance** expenses.

They will provide the simplest, most economical and most satisfactory means of attaining this ideal condition. Note the following points.



1. Positive in action and always dependable.

2. Perfectly cushioned by water and air both in opening and closing.

3. Fitted with electric solenoid that enables the valves to be opened wide from distant point in case of fire or other emergency.

4. Again closing the circuit for a few seconds will automatically restore the valves to normal position.

5. Provided with special safety operating piston making the accidental entrance of high pressure into the low pressure side impossible.

6. Easily adjusted to deliver the desired pressure from the outside.

7. All water passages are large to prevent danger of clogging.

8. Made in sizes to 24 inches.

9. Correct in every detail and virtually indestructible.

Golden-Anderson Patented Life and Property Insurance Valves

Globe Angle and Elbow Patterns

Sizes to 20 in.

1. Automatically protects the plant against complete boiler shutdown, in case of accident, to any one boiler, by absolutely preventing back flow of steam.

2. Positively protects against pipe explosions by instantly shutting off all steam flow when a break occurs in any steam pipe line.

3. Automatically equalizes pressure between all boilers.

4. Automatically cuts a boiler into service.

5. Prevents inflow of steam to a cold boiler.

6. Positively cushioned. No hammering, spinning or sticking.

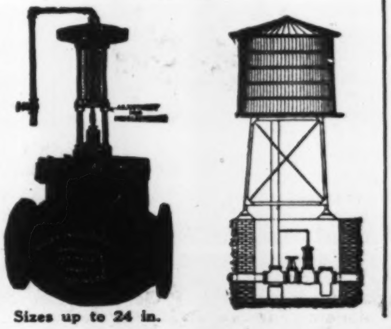
7. 1650 repeat orders from U. S. Steel Corp.

Golden-Anderson Patented Cushioned Automatic Altitude Controlling Valves

They stop all water waste down the overflows of reservoirs, standpipes, tanks, etc., by automatically maintaining the water level constant at the desired level. They operate without floats or fixtures.

Three ways of closing:

1. By water.
2. By electricity from distant points.
3. By hand.



Sizes up to 24 in.

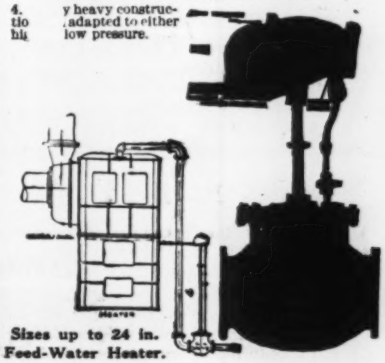
Golden-Anderson Patented Automatic Cushioned Controlling Float Valves

1. They eliminate the heavy loss of water down your feed water heater hot well and other tank overflows by accurately controlling the make-up water.

2. Automatically hold a constant water level without atte on.

3. fectly cushioned both by water and air.

4. y heavy construc- tio adapted to either hi low pressure.

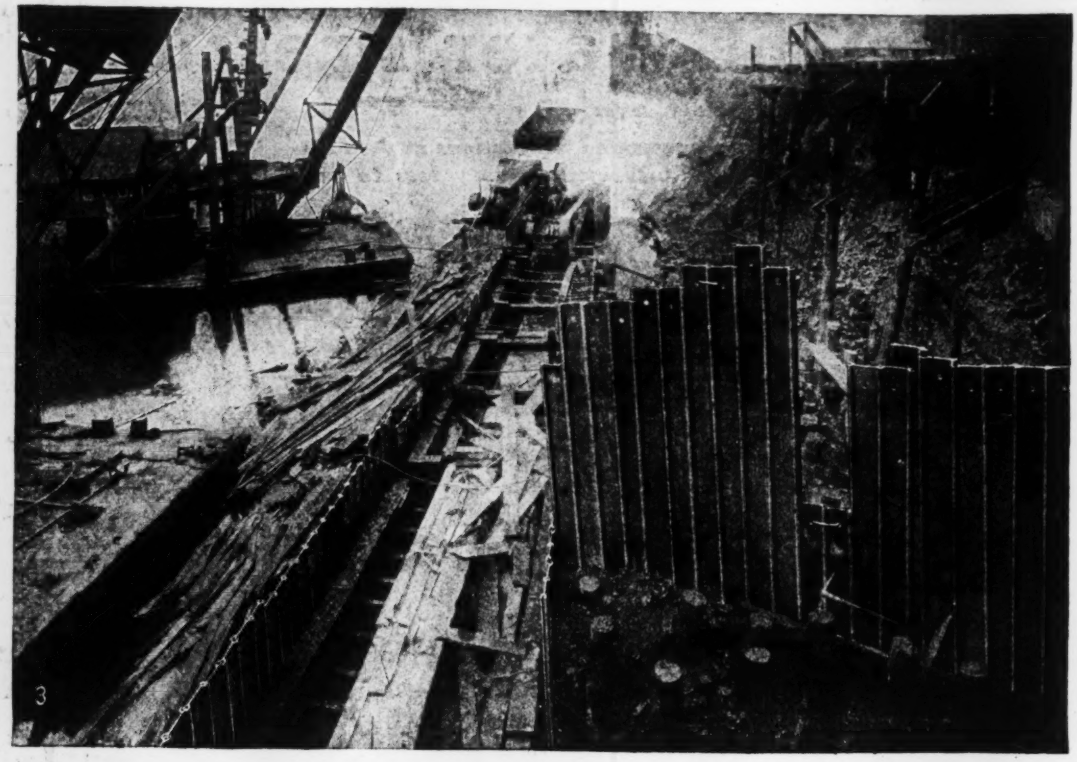


Sizes up to 24 in. Feed-Water Heater.

"Hosts of References"—"Every Valve With an Absolute Guarantee"

Golden-Anderson Valve Specialty Company

1202 Fulton Building, Pittsburgh, Pa.



A good way to use Lackawanna Steel Sheet Piling in building river retaining walls

Here is a good type of unit cofferdams of Lackawanna Steel Sheet Piling for building river retaining walls. In this particular instance, at the plant of the Pressed Steel Car Co. of Pittsburgh, a coal pocket was built behind the retaining wall and made part of it, with the cofferdam protecting the foundation of coal pocket during construction.

These cofferdams were about 100 feet long, the last one, however, being 200 feet long, and the concrete work extended to about 14 feet below pool level. From the nature of the work, it is evident that the Lackawanna Steel Sheet Piling was used a number of times, and that if the 200-foot cofferdam could be successfully unwatered and kept dry in a sand and gravel soil as exists here *Lackawanna Steel Sheet Piling must be watertight.*

The method of construction adopted by the contractors here, The Dravo Contracting Co., Pittsburgh, was economical in that the permissible preliminary dredging was done before setting the steel sheet piling walls, which had to be driven subsequently only about eight feet.

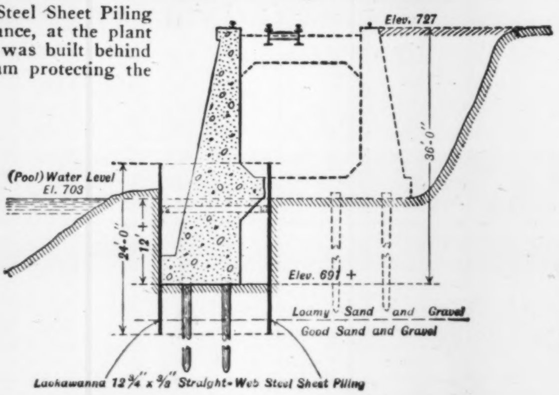
We are told that although water came up through the bottoms of the excavated cofferdams, no trouble was experienced in maintaining dryness, a 10-inch centrifugal pump running at moderate speed having met all requirements.

The unfailing dependability of properly selected and driven Lackawanna Steel Sheet Piling is always a source of profit to the wise contractor and gives him a confidence as to uninterrupted progress not otherwise obtainable.

Try one installation and you will want more. Our literature and our engineers will help you to get the most from the investment.

DOUBLE-LOCK
LACKAWANNA
INTERLOCK

A tightening action under pressure that makes a single wall cofferdam watertight, even in deep, clear water.



Lackawanna Steel Company

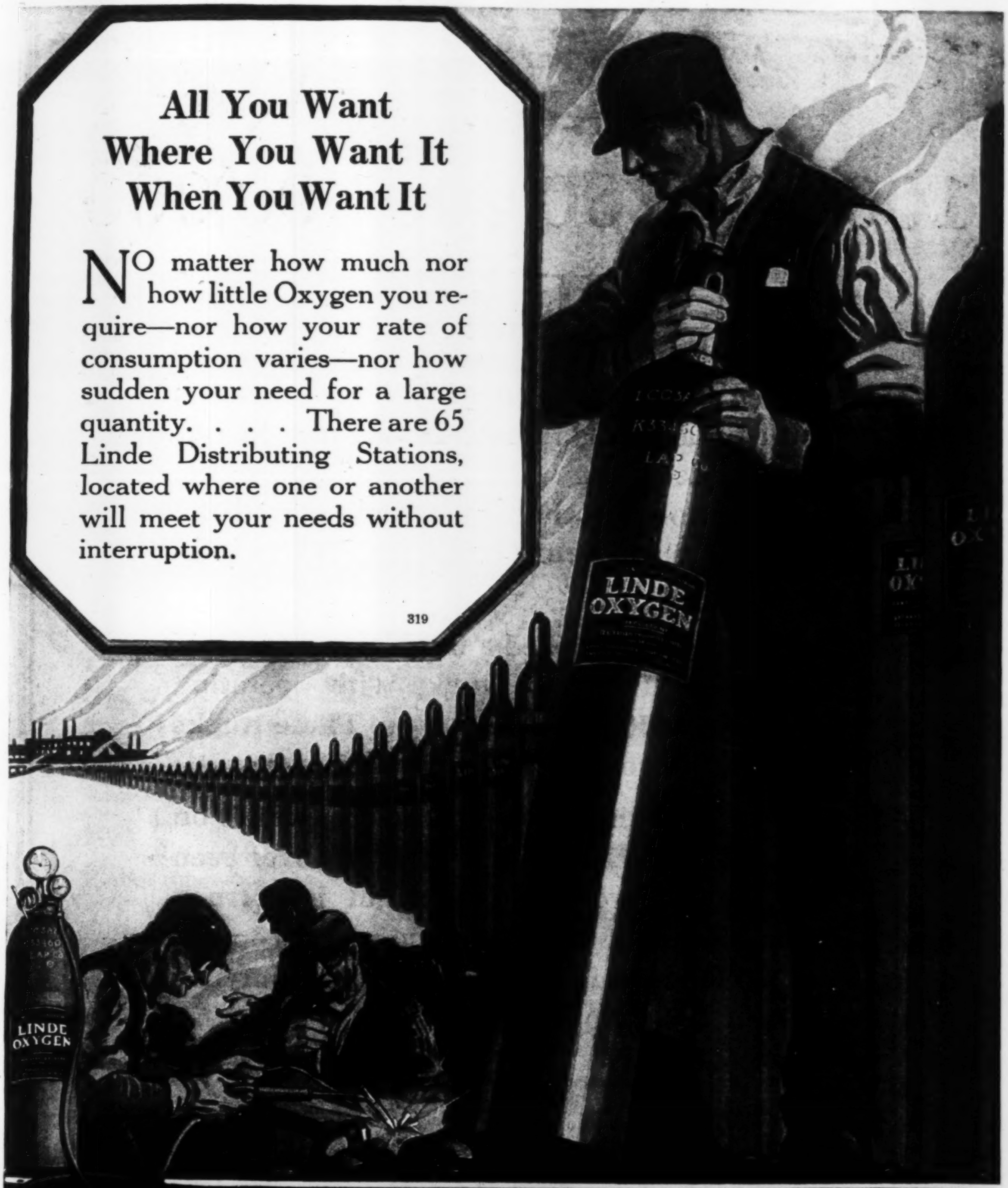
General Sales Office and Works: Lackawanna, N. Y.

Atlanta
Boston
Buffalo
Chicago
Cincinnati
Cleveland
Detroit
New York
Philadelphia
San Francisco
St. Louis

Licensees for the manufacture of Lackawanna Steel Sheet Piling: For Great Britain and British Colonies in the Eastern Hemisphere: Cargo-Fleet-Iron Co., Middlesbrough, England. For France, Italy, Spain, French Colonies and Protectorates, Italian Colonies and Spanish Colonies in the Eastern Hemisphere: Cie Des Forges & Aciéries de la Marine et d'Homécourt, Paris, France.

Sole Exporters for Other Countries:
Consolidated Steel Corporation, 165 Broadway, New York

409



All You Want Where You Want It When You Want It

NO matter how much nor how little Oxygen you require—nor how your rate of consumption varies—nor how sudden your need for a large quantity. . . . There are 65 Linde Distributing Stations, located where one or another will meet your needs without interruption.

319

The Linde Air Products Company

Largest Producer of Oxygen in the World

30 East 42d Street
New York

KOHL BUILDING
San Francisco

Owners Records of

100,000-200,000-300,000

MILES

THE ultimate mileage of White Trucks is still unmeasured. Some have rounded out 300,000 miles. Many have run 200,000 miles. Hundreds, probably thousands, have passed the 100,000 mark—a very common White performance.

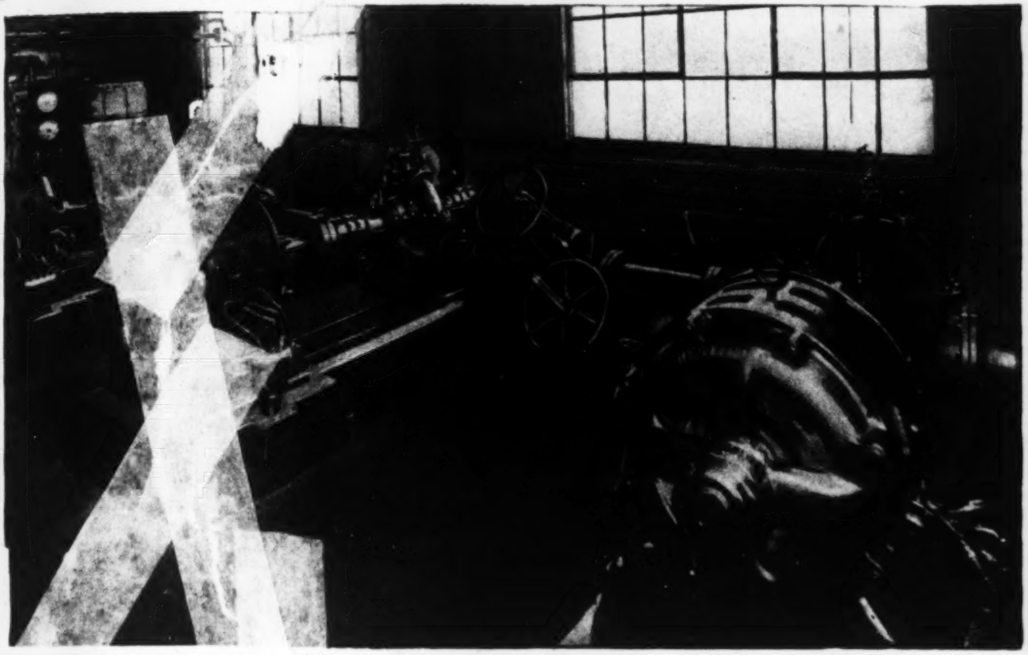
We have just published a book which tells of more than 400 White Trucks with operating records of 100,000 miles and over. These trucks are still giving good service today.

This book is the most convincing exhibit on the subject of truck durability that has ever been presented. It gives a new insight into truck economy through truck longevity. A copy of "100,000 Miles and More" will be sent to anyone interested, upon request.

WHITE TRUCKS

THE WHITE COMPANY, *Cleveland*

AMERICAN
TRADE MARK REG'D U.S. PAT OFFICE



The Barrett Company Are Well Satisfied With the Above Installation of "AMERICAN" Pumps and Had No Hesitancy in Saying So

Their letter follows:

Frankford, Philadelphia
March 19, 1919

"We are pleased to state that the three 8-inch American Centrifugal Pumps, operated in our filter plant for the past two years, have proven very satisfactory indeed."

(Signed) THE BARRETT COMPANY,
Chemical Department,
H. J. WRIGHT, Plant Engineer.

The installation which was sold by Sciple Gochenour Mfg. Co., our Philadelphia representatives, consists of three AMERICAN Type DSMB, 8-inch special centrifugal pumps, direct connected to a 75-hp., 220-volt, 2-phase, 60-cycle a. c. motor, operating at 1800 r. p. m.

This pump has a capacity of 1400 g. p. m. against a total head of 150 feet, including a suction head of 25 feet.

The shells were built to withstand a pressure of 250 lbs. pressure

Impeller, wearing rings, shaft sleeves and gland are of bronze.

Efficiency developed was 74 per cent.

The original order was for two pumps and later, after a thorough trial, the third pump was added.

This is cited, merely as another among many instances, indicating the satisfaction rendered by AMERICAN pumps in service.

Catalog 149 describes our centrifugal pumps and No. 130A our deep well plunger pumps These will be sent to any address on request.

The American Well Works

General Offices and Works: Aurora, Ill., U. S. A. **Chicago Office: First National Bank Bldg.**

District Sales Agencies:

New York City
Philadelphia, Pa.
Pittsburgh, Pa.
St. Paul, Minn.
St. Louis Mo.
Dallas, Texas
Birmingham, Ala.
Kansas City, Mo.
Joplin, Mo.
Lincoln, Neb.
Denver, Colo.
San Francisco, Cal.
Salt Lake City, Utah
Los Angeles, Cal.
Artesia, N. Mex.
Edmonton, Alta.
Calgary, Alta.
Chatham, Ont.
Montreal, Canada.

Roof planks of weave shed of textile-mill destroyed by decay in nine years.

(Courtesy F. J. Hoxie, eng., Associated Factory Mutual Fire Insurance Cos., Boston.)

Partly Decayed Wood is a Serious Fire Hazard

The Inspection Department of the Associated Factory Mutual Fire Insurance Companies, in their pamphlet "Dry Rot In Factory Timbers" states—*"The loss to mills from rotting timber is many thousands of dollars a year. Wood infected by dry rot ignites more easily than sound wood, and mill timbers with rotted ends fall more quickly under fire."*

Rotted timbers are also apt to fail mechanically, jeopardizing the life and limbs of workmen.

The use of Carbosota Creosote Oil will retard decay, practically eliminating rot and lessening the fire hazard. *Creosoted wood, when dry, is no more combustible than sound untreated wood, and is decidedly less inflammable than partly decayed wood.*

"Of whatever kind of wood the outer part of the roof is (referring to a double roof), *it should be completely penetrated with hot creosote so as to sterilize it and prevent the development of fungus. Such an outer* insulating covering will be found *as practicable for a concrete roof as for a wooden roof."* (F. J. Hoxie, American Architect, 1-29-19).

Non-pressure treatments are most suitable to the conditions encountered in new construction, or repairs to roofs. Every mill should be equipped with a simple open tank creosoting plant, and all timbers and boards which will be placed in a situation favorable to development of decay, should be creosoted.

Barrett
B
Carbosota
Grade-One Liquid
Creosote Oil

Carbosota Creosote Oil is a pure, high-grade coal-tar creosote oil, especially refined for use in non-pressure processes. It conforms to the recognized standards, as represented by Specification No. 128, issued by the United States Shipping Board Emergency Fleet Corporation.

The services of our experts may be obtained gratis, when required.

(Green wood cannot be effectively creosoted by non-pressure processes. It should be air-dry. In regions of moist, warm climate, wood of some species may start to decay before it can be air-dried. Exception should be made in such cases, and treatment modified accordingly.)

The Barrett Company

New York Chicago Philadelphia Boston St. Louis Cleveland
Cincinnati Pittsburgh Detroit New Orleans Birmingham Kansas City
Minneapolis Nashville Salt Lake City Seattle Peoria Atlanta
Duluth Milwaukee Dallas Bangor Washington Johnstown
Lebanon Youngstown Toledo Columbus Richmond Latrobe
Bethlehem Elizabeth Buffalo Baltimore
THE BARRETT COMPANY, Limited: Montreal Toronto Winnipeg
Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

Plant for creosoting roof boards and timbers with Carbosota by Open Tank Process. Two wooden tanks lined with galvanized sheet iron, soldered at joints, one for "hot treatment," the other for "cold treatment."

Permanent portable plant built by large paper mill for creosoting roof boards and miscellaneous lumber. (a) Tank for hot treatment. (b) Tank for cold treatment. (c) Tank for catching drippings.